

Preface: Important Note to Readers of this Report

Readers of this report should be aware that this is only one of fourteen vertical industry reports developed by INPUT for Moore IDS. These vertical reports, in turn, are followed by a single cross-industry report that serves the central mission as the final report of this project: to provide cross-industry market opportunity recommendations that will help Moore IDS to focus strategically on a very limited number of high-value opportunities -- whether within a single industry or across several.

Therefore, readers should keep in mind several considerations while reviewing the findings in this report:

- To serve the central mission of helping Moore IDS to achieve strategic focus on a limited number of market opportunities, INPUT has applied a tight screening process to the applications examined in each vertical industry. The selection criteria targeted mission critical, high frequency, repetitive variable imaging applications that would represent an ongoing base of predictable revenue, as opposed to the current mix of ad hoc, project oriented overflow work with peaks and valleys of a less predictable nature.
- Due to this tight screening process, readers may find that these vertical reports fail to mention certain applications even though these represent currently viable Moore IDS revenue sources.
- Finally, recommendations presented in this report's single-industry format must be recognized by readers to be somewhat out of context: an opportunity that looks excellent --relatively-- within a single industry may turn out to be dwarfed by applications in other industries, or an application that looks to be of minimal attractiveness in a single industry may prove to be closely paralleled in several other industries -- in such a way that together they constitute a preeminent cross-industry opportunity. INPUT discusses such findings in the cross-industry analysis report. Note that these cross-industry recommendations are the primary objective of this project, and thus they supersede those of the individual vertical market reports. The final cross-industry report should be examined for such perspective by any reader of this single-industry report.

It is hoped that this note will help readers to place the findings presented here in the proper perspective, especially insofar as cross-referencing this single-industry viewpoint with the final report's cross-industry findings and recommendations.

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STET

An additional note: Subsequent to the preparation of this report the definition of "basic" versus "enhanced" services was slightly modified and simplified. The impact on this report was to move the ~~"auto ID card"~~ application opportunity from the enhanced to the basic service category. This change is reflected in the tables and data of the final cross-industry analysis report.



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Addendum to Insurance Industry Opportunity

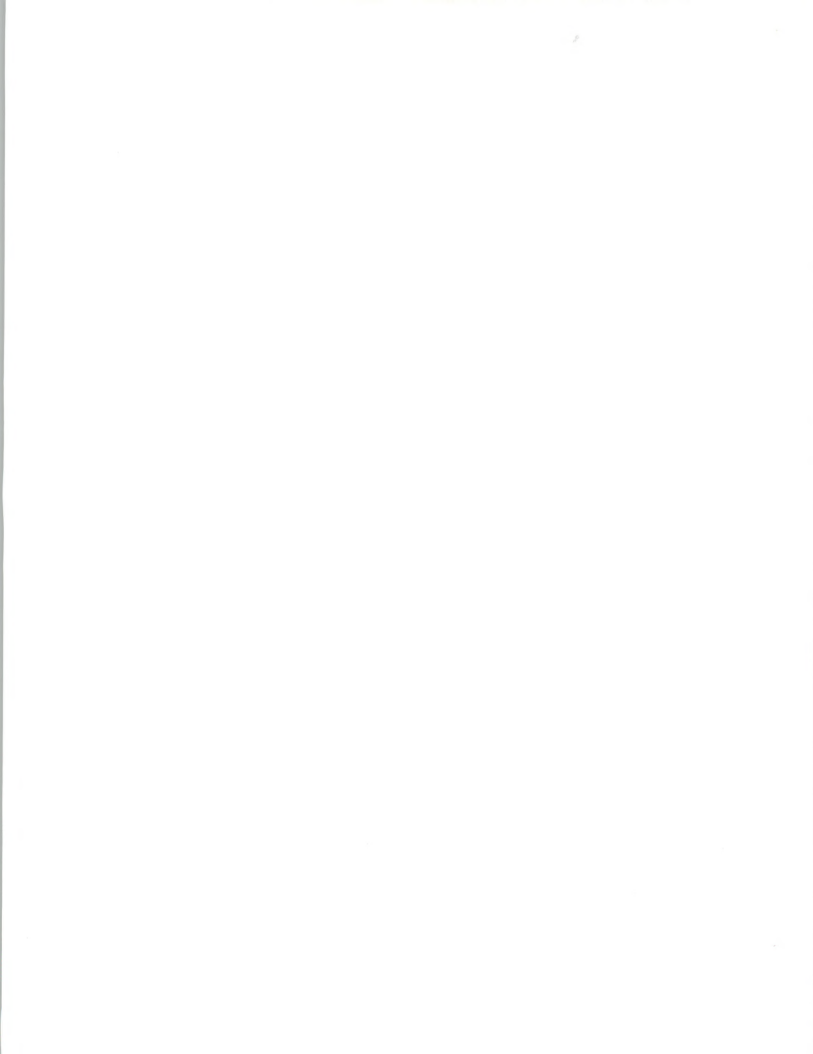
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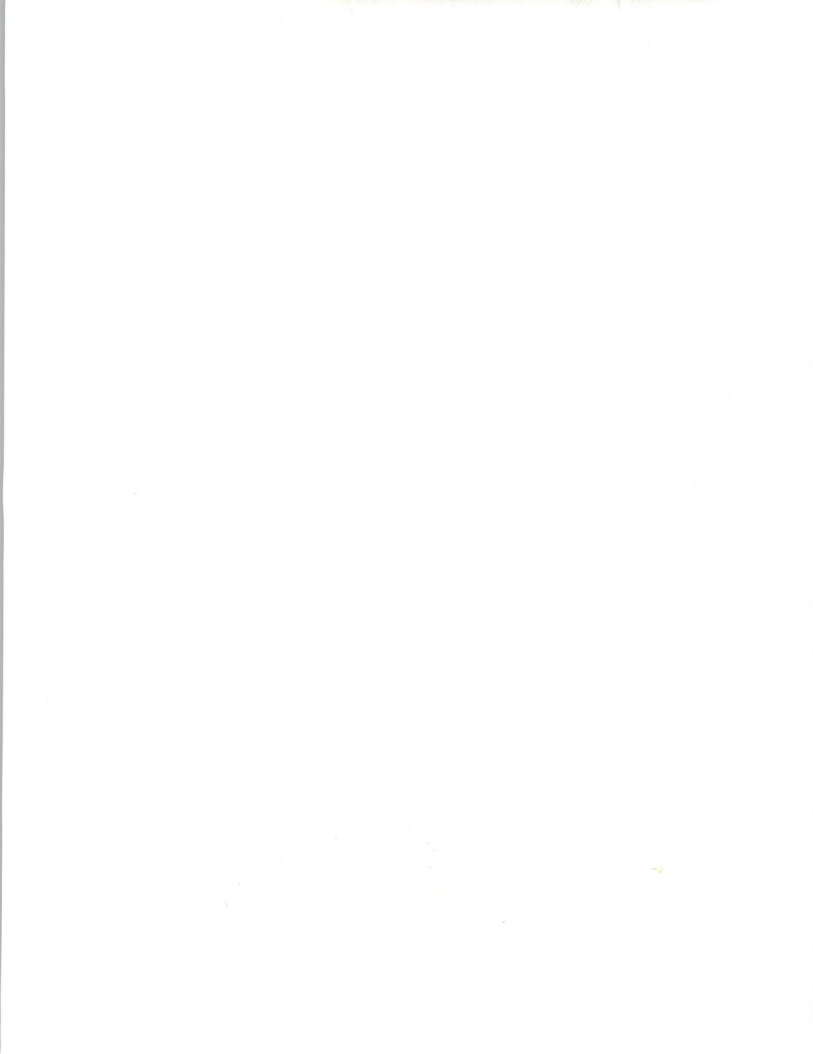


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OCTOBER 1989

INSURANCE INDUSTRY OPPORTUNITY ANALYSIS

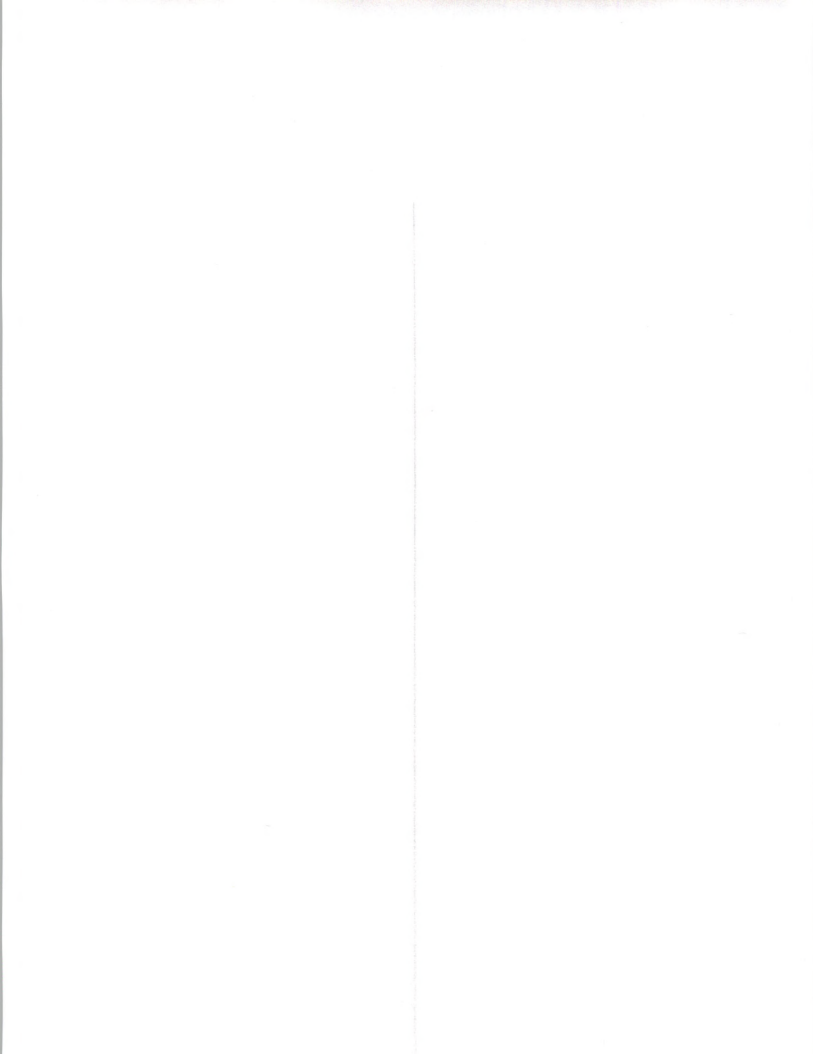


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Introduction





Introduction

A

Objectives

INPUT has conducted this research to meet objectives agreed upon with Moore Business Form's Information Distribution Services division ("Moore IDS"). See Exhibit I-1.

EXHIBIT I-1

Insurance: Key Research Objectives

- Evaluate business opportunities for both basic and enhanced services
- Achieve focus on leading opportunities
- Assess sales and delivery requirements
- Provide data for cross-industry evaluation

To meet most effectively the objective of providing Moore IDS with a comprehensive evaluation of insurance industry business opportunities, a fundamental distinction is made between basic and enhanced application service opportunities.

Basic services are defined as those which Moore IDS could serve with production technologies already installed, and which customers generally are handling with their own in-house production facilities. Basic services are almost always handled in-house by customers now, to greater or lesser degrees of satisfaction.

Enhanced service opportunities, in contrast, are those which are not yet being handled in-house—at least in comprehensive or efficient fashion—by most customers. In these cases, in-house operations either may handle some—but not all—of the functions required comprehensively, or may be functioning in a relatively ill-coordinated or inefficient manner.

Moore IDS wishes to achieve focus on a limited number of key opportunities within each industry studied. This will serve a more pro-active (rather than reactive) marketing thrust, as well as helping to limit the planning and investment required to develop new mechanisms—including equipment, facilities, and other technology—that are necessary to sell and deliver additional services.

Looking forward to the future delivery by INPUT of information on opportunities in a wide range of target industries, this research also serves to gather data that can be cross-referenced among industries at a later date.

EXHIBIT I-2

		Insurance: Three Types of Application Opportunities	
		MOORE IDS	
		Today	Future
IDS Customers	Today	Basic Business Mailings (95%+ in-house market) IDS ?	Avoid
	Future	Priority #1 (Extended services)	Priority #2 (Value-added services)

INPUT has developed the taxonomy shown in Exhibit I-2 for analyzing and prioritizing Moore IDS service opportunities. As shown in the exhibit, the axis on the top is labeled "Moore IDS," while the left axis is labeled "IDS Customers." Further, each axis is split between "Today" and "Future."

Referring to these axis labels, the upper-left quadrant can be interpreted as within today's capabilities both for Moore IDS and for IDS customers. This situation is defined by INPUT as containing Moore IDS's basic business-mailing service opportunities. Generally such basic services can be handled using technology already installed by both Moore IDS and current/potential IDS customers; laser-printing-based applications are prime examples. Virtually all of this potential volume is now handled in-house by the insurers interviewed, and the small "IDS ?" notation in this quadrant suggests only an uncertain possibility for Moore IDS to capture this business. Pursuit of such short-term opportunities may be useful to secure limited—yet immediate—revenue opportunities from selected insurers with minimal cost impact to Moore IDS, since the required technology is already installed. These opportunities, however, are not rated by INPUT as either number-one- or number-two-level priorities because they do not represent ideal mid-term or long-range opportunities for significant Moore IDS revenue growth. In most cases, the "in-house competitor" has these services firmly locked up, barring any Moore IDS ability to offer a significant price advantage at comparable or superior quality levels.

The upper-right quadrant is labeled "avoid" because customers can handle these today with in-house capabilities, yet Moore IDS would have to invest in new technologies in the future to provide even comparable services—services that then might not compete attractively with the existing in-house alternative.

In contrast to the basic services located in the upper-left quadrant, both the lower-left and lower-right quadrants represent the category of enhanced services, as defined earlier. It is useful for purposes of analysis, however, to make further distinctions within the category of enhanced services.

The lower-left quadrant represents services that Moore IDS is equipped to provide today, while to most customers these represent only future in-house possibilities, as the technologies installed at present do not yet support these services. Moore IDS can provide these services without new capital investments, potentially offering a high level of cost-effective service that prevents in-house investment in the technologies that in-house shops would require to compete with Moore IDS. Customers benefit by getting these new services immediately and without new capital investments, making this lower-left quadrant the most attractive

set of opportunities—Priority #1 for Moore IDS attention. INPUT labels these opportunities as extended services. One interpretation of “extended” is that customers will generally consider such services an extension of their current operations, where they are simply choosing to out-source to Moore IDS rather than invest in incremental in-house technology.

The lower-right quadrant is labeled as value-added services for several reasons. First, these generally represent futures, outside the scope of today’s variable-imaging operations, either at customer locations or at Moore IDS facilities. This is either because the technology is still new and generally expensive, or because neither in-house operations nor outside vendors have packaged the required separate operations into a single service bundle. Second, if offered by an outside vendor like Moore IDS, such services can be market-positioned as adding value to the client enterprise, generally because a significant cost/competitive advantage is achieved that sets the purchaser of the service apart from its general industry environment.

Note that from Moore IDS’s perspective such offerings represent future technology acquisitions and/or corporate alliances/acquisitions that might require costly investments to achieve. Thus, this lower-right quadrant is labeled Priority #2 opportunities—services that will prove attractive to Moore IDS only to the extent that further examination justifies the investments required. Such investments by Moore IDS—perhaps on an accelerated, near-term basis—may be especially cost-effective in situations where cost (or other) factors make it likely that only a handful of very-large-size industry leaders will invest in such technology in the near term, offering Moore IDS the opportunity to “sweep up” the rest of the industry with a timely, new, and highly competitive service opportunity that is validated by the leaders’ in-house actions.

B

Scope

Agreements between INPUT and Moore IDS as to the scope of the research to be conducted included both the insurance market segments to be covered (also noting those to be excluded) and the size of companies to be interviewed (see Exhibit I-3).

The bulk of mainstream insurance companies are primarily either Property and Casualty (P&C) or Life and Health (L&H) insurers, although companies are increasingly acquiring or opening minority divisions that cross this line. Two specialized forms of L&H insurers were interviewed to a lesser extent: the non-profit, state-based Blue Cross/Blue Shield organizations (Blues) that provide only health benefits, and so-called Third-Party Administrators (TPAs), whose primary mission is to administer health claims for relatively large corporations that choose to self-insure rather than pay for an employee health insurance program. TPAs generally receive health and/or pharmacy claims directly from employ-



EXHIBIT I-3

**Insurance:
Research Scope**

- Market segments covered
 - Property and Casualty (P&C)
 - Life and Health (L&H)
 - Including state Blue Crosses/Blue Shields (Blues)
 - Including Third-Party Administrators (TPAs)
 - Excluded: Agents/Brokers, Health Maintenance Organizations, Government
- Size of organizations contacted
 - Almost all mid-sized
 - Under \$1 billion in premiums
 - Over \$50 million in premiums

ees, care providers, and/or pharmacies; validate or investigate/challenge the appropriateness of the claim; and pay the resulting benefits directly from a fund provided by the corporation that is self insuring, providing a regular statement of claims, challenges, payments, etc.

Moore IDS specified the exclusion of the insurance industry segments of agents/brokers, health maintenance organizations, and government health insurance programs (like Medicare), as generally not being users of Moore IDS services.

In terms of size of organizations contacted, INPUT interviewed only a few large P&Cs and L&Hs, with large defined as over \$1 billion in annual premiums collected from insureds. This was a joint Moore IDS/ INPUT decision, based on the presumption that large insurers' heavy business-mailing volumes made it likely that strong in-house operations were in existence, operations that would prove very difficult for Moore IDS to compete with. Note that this presumption was confirmed in the limited number of large-company interviews conducted.

Small companies were excluded due to the presumption that their smaller volumes would make them less attractive to Moore IDS, especially regarding the value to them of pioneering enhanced services.

Note that TPAs do not collect premiums. In the insurance industry in general, however, a dollar of premium collected represents roughly a dollar of claim paid: about 70 to 80 cents of each expense dollar is for

claims, and profits after expenses are relatively slim in most years. Thus INPUT secured TPA interviews only with those paying over \$50 million a year in claims, for rough equivalency with the P&C and L&H sectors.

C

Methodology

To conduct this research, INPUT applied a standard, proven methodology for interview-based custom research shown in Exhibit I-4.

EXHIBIT I-4

Insurance: Research Methodology

- In-person informational and test interviews
- Development of draft telephone questionnaire
- One-day meeting with Moore IDS insurance industry marketing manager
 - Vertical market report outline
 - "Ideal" application profile
 - Industry segmentation
 - Draft-questionnaire revision
 - Target interview audience and segment allocation
 - Agreement on sourcing target interviewees
- Telephone interviews
 - "Cold calls" to find first senior executive, each firm
 - "Networking" as required to secure interviews
- Analysis and report writing

The research project began with in-person informational interviews with Moore IDS managers and test interviews with select Moore IDS customers, including one insurer, conducted by the project manager. The first-draft telephone interview questionnaire resulted, revision of which was one of the subjects at a one-day planning meeting with the Moore IDS insurance industry marketing manager. That meeting also included profiling an "ideal" application from the standpoint of Moore IDS (leading, for example, to the discounting the value of securing more W-2s and 1099s, which would just add to a yearly overload for Moore IDS) and the other subjects listed.



That meeting also set the stage for the telephone-interviewee sourcing methodology. First, a "cold call" was made to the secretary to the president of an insurer, explaining the purpose of the call and securing reference to a "first" target executive who would likely be knowledgeable on the interview's subject matter. Second, that executive—or the secretary to that executive—was called, which often led to a networking reference to another executive or a lower-level manager; such networking often required several stages of reference to find the right individual. (See Exhibit I-5)

EXHIBIT I-5

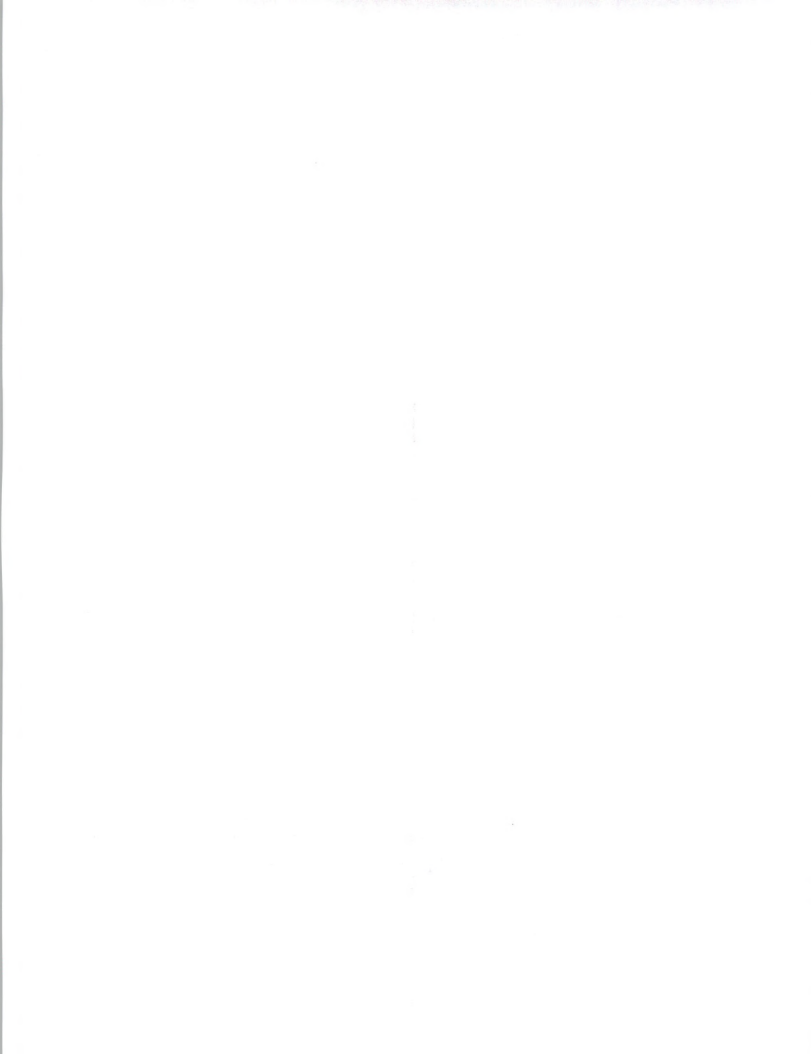
**Insurance:
Interviewing Statistics**

- Over 115 companies contacted "cold"
 - Start: No individuals' names or references provided
 - INPUT had agreed that Moore IDS customers would be a poor sample
- Over 300 calls made during 10 days
 - Secured 25 interviews
- When reached, 24 other executives refused to participate
 - "There is a 'company policy' against telephone questionnaires," or
 - "I'm not willing to take 20 minutes for such questions"

Note: Over 300 calls, multiplied by about 3 human contacts each, equals about 1,000 human contacts; roughly 500 required brief "reason for the call" communication

Note: Emphasized the computer-printing function (getting information out and printed for mailing)

Although eventually successful, as noted above, this methodology proved relatively expensive in terms of number of calls and time required to call. To explain the purpose of the call in roughly half the cases—about 500 explanations in all—secured just 25 interviews. One interpretation of the high refusal rate is that INPUT was quite successful in reaching high-level individuals initially, but they were also most likely to be the ones to refuse.



It became obvious relatively quickly that the person most likely to be able to provide useful answers—especially as to today's operations—was someone in computer operations, since the types of variable-printing business communications at issue is handled basically as another form of computer-printing output; the mailing function is secondary and tends to vary little from other corporate mailroom challenges, including those of efficiently inserting enclosures and stuffing envelopes. The final interviewing sample is shown in Exhibits I-7, I-8, and I-9.

EXHIBIT I-6

Insurance: Interviewing Sample

- Planned for 30 interviews
 - 8 in P&C (including 2 large)
 - 14 in L&H (including 2 large)
 - 4 Blues
 - 4 TPAs
- Stopped after 25 interviews
 - 8 in P&C (including 2 large)
 - 9 in L&H (including 3 large)
 - 4 Blues
 - 4 TPAs
- Two reasons for stopping early
 - L&H interviews were not yielding new insights
 - Decision to use the time for preliminary-results meeting (not previously planned)
- Average interview length: About 25 minutes

Given the relatively high time-expense of cold calling to secure interviews, it proved fortunate that patterns in L&H became clear before the full complement of those interviews was fulfilled. Further L&H interviews would have wasted time and resources without significantly affecting the results, INPUT determined. Also, this permitted the INPUT interviewer to reallocate time for a meeting to review preliminary results with Moore IDS, a meeting not included in the original project plan that proved most useful in shaping further analysis and report writing.

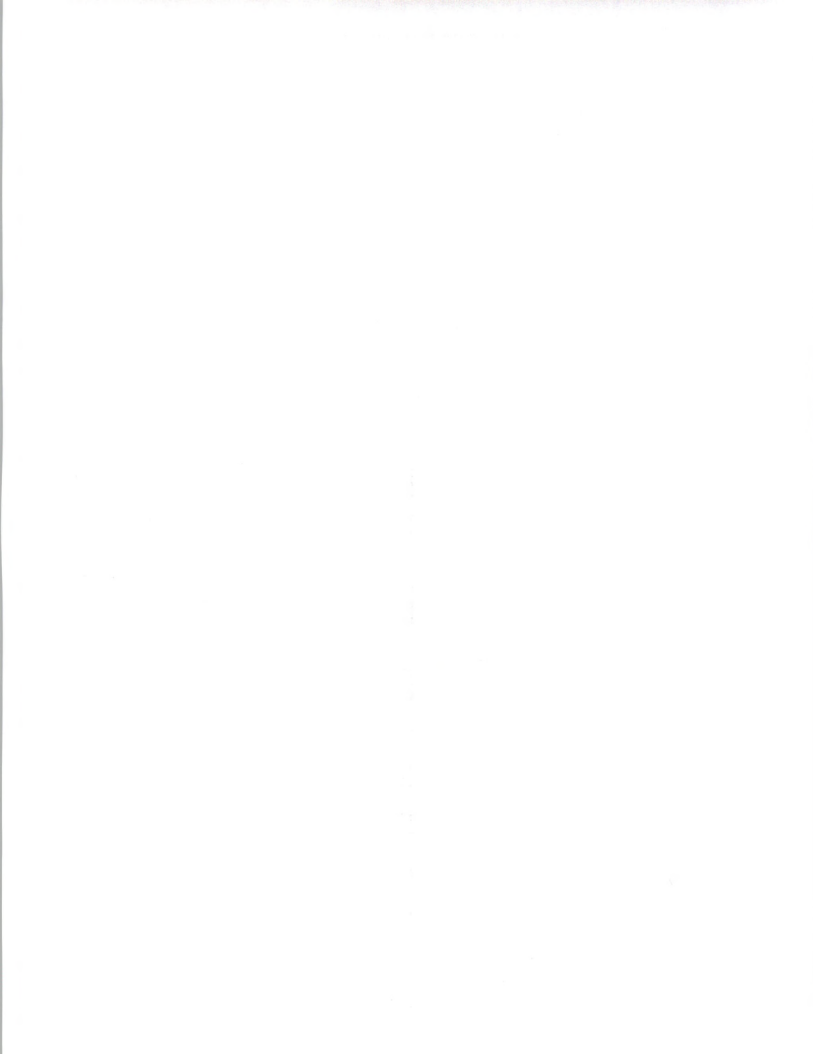


EXHIBIT I-7

**Insurance:
Companies Interviewed**

- P&C
 - American Family Mutual
 - American Manufacturers (Kemper)
 - Farm Bureau Mutual, Kansas
 - Farmers Mutual Hail of Iowa
 - Hartford Fire
 - Pennsylvania National Mutual Casualty
 - Public Employees Mutual
 - Virginia Farm Bureau
- L&H
 - Amex Life
 - Commonwealth
 - Jefferson Pilot
 - Pacific Mutual Life
 - Principal Mutual Life
 - Provident Mutual
 - Reserve Life
 - State Farm
 - Woodmen Accident and Life
- Blues
 - Blue Cross/Blue Shield of Georgia
 - Blue Cross/Blue Shield of Missouri
 - Blue Shield of Western New York
 - Capital Blue Cross
- TPAs
 - Alta Health Strategies
 - Comprehensive Benefit Service Co.
 - Corporate Claims Services
 - La Hood and Associates

Given the emphasis on mid-sized companies, relatively few insurers on the interview list are well-known.



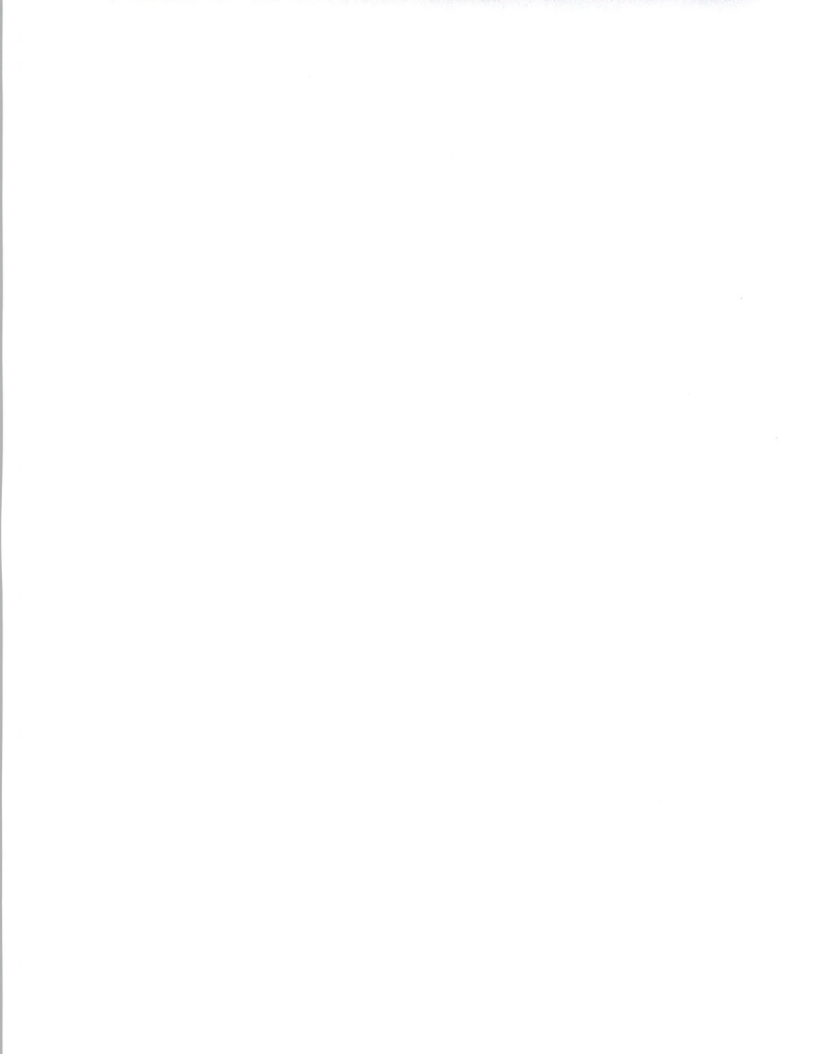
EXHIBIT I-8

**Insurance:
Categories of Interviewees**

- Functional areas interviewed
 - 15 Information Services/Data Processing
 - 6 Operations/Administration/Support
 - 2 Claims/Benefits
 - 2 Office Services/Forms
- Titles interviewed (roughly ranked)
 - 4 Senior VPs
 - 7 VPs
 - 5 Managers
 - 5 Directors
 - 1 Office Manager
 - 1 Systems Analyst
 - 1 Administrator
 - 1 Supervisor, Forms

Note: All interviewees know variable-image printing well;
some knew less about mailing

Given the importance of computer printing to the variable-imaging business communications under investigation, information services and data processing are heavily represented in the interview sample. Almost half of the interviewees are senior vice presidents or vice presidents; note, however, most insurers have one or more executive vice presidents above the senior vice president level. Despite such high levels, all interviewees are well informed about their variable-imaging functions, although at senior levels some could not provide document-count figures; a number of interviewees know less about mailing functions. Senior-level executives are especially effective, in general, at “fantasizing” what they would like to see—and, by inference, potentially would pay for—in five years.





Executive Overview





Executive Overview

INPUT conducted telephone interviews with executives and managers from 25 insurers, with a majority from Life & Health segments and a minority from the Property & Casualty segment. Roughly half the interviewees were senior-level executives, and the rest were mid-level managers. Most interviewees were from information systems or data processing.

Interview results are extremely consistent, except for certain segment-specific topics. In particular, virtually no current outsourcing of Moore IDS-type applications is evident, and interviewees are generally hostile to the idea of such outsourcing of what they consider to be “mission critical” business communication applications (see Exhibit II-1). A primary reason for the hostility is recent successes reported in implementing laser printing for key high-volume applications. Few real problems are cited by interviewees, although some desired improvements are identified. A consistent future “fantasy” is the substantial elimination of paper for business communications and for internal files.

Of the wide range of business communication applications considered during interviews, only three—policy documents, premium (billing) notices, and explanations of benefits (EOBs) sent with checks to pay claims—were confirmed as universally mission critical to operation of the insurer’s business.

INPUT recommends that Moore IDS target application opportunities defined as basic services—which can be handled with printing, mailing, and information services technologies already installed by Moore IDS—as follows:

- Explanations of benefits (EOBs) printed and mailed with checks, for the health-related subsegments of the Life & Health segment

EXHIBIT II-1a

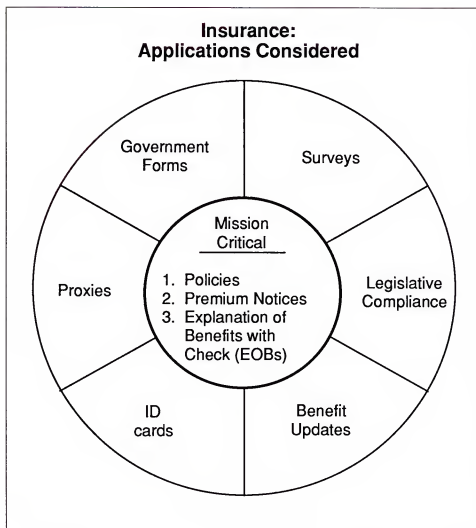
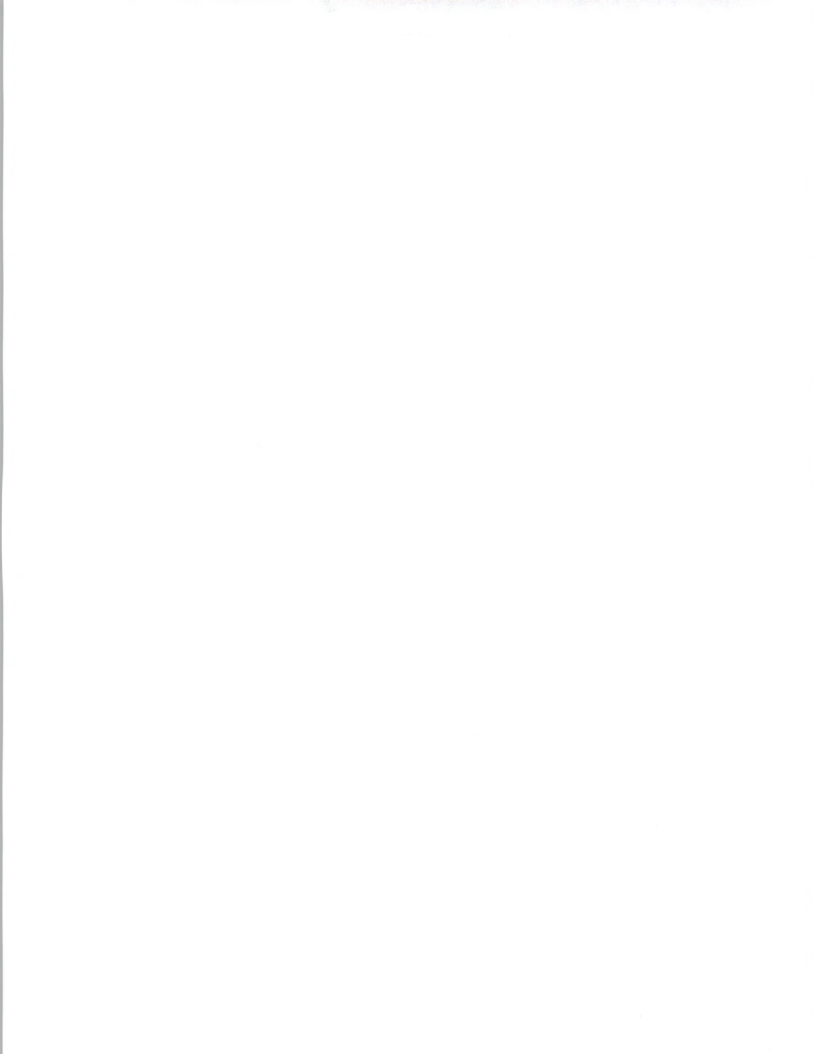


EXHIBIT II-1b

**Insurance:
Willingness to Outsource
Basic Printing/Mailing**

	Percent
Current (actual) practice	4
Willing to consider in future	24



- Policies printed and mailed for the Commercial Property & Casualty subsegment (recommended with reservations about available technology)

Further, INPUT recommends that Moore IDS target application opportunities defined as enhanced services—which will require new information services technologies—as follows:

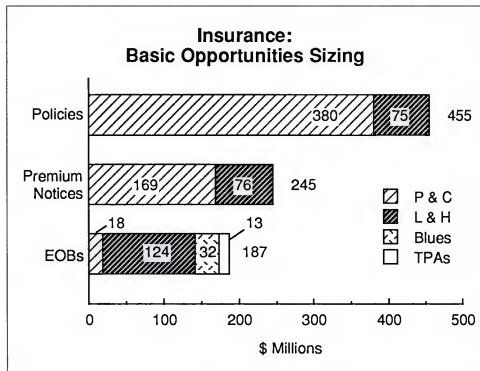
- Electronic-data-interchange (EDI) -based health claims filings services
- Electronic imaging and filing services
- Electronic premium-billing services, based on EFT/ACH (Electronic Funds Exchange/Automated Clearing House) communications and computer technologies

A

Application Opportunity Size

Although market forecasts are deemed not appropriate for these applications, a methodology was applied to develop rough opportunity sizing measures for quantitative comparison of these applications. This provides Moore IDS with a measure of total latent potential expenditures for the service without regard to rate of adoption, in-house versus external solutions, competition, and so on (see Exhibits II-2 and II-3).

EXHIBIT II-2



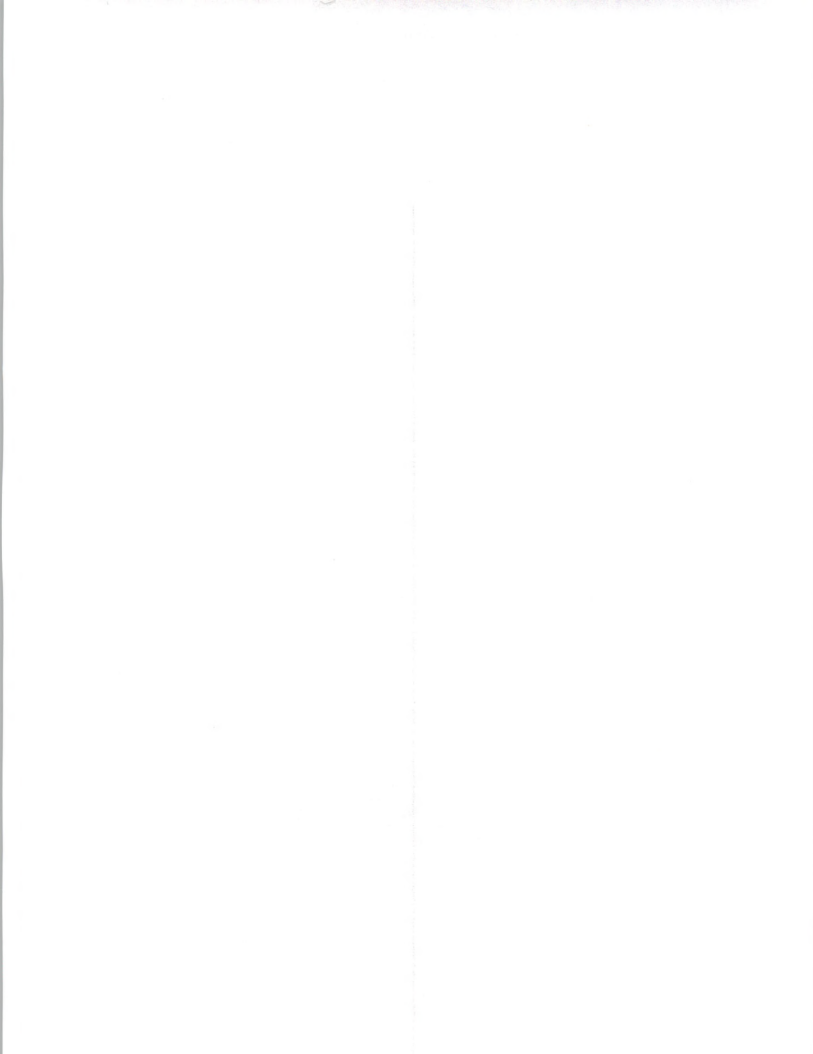
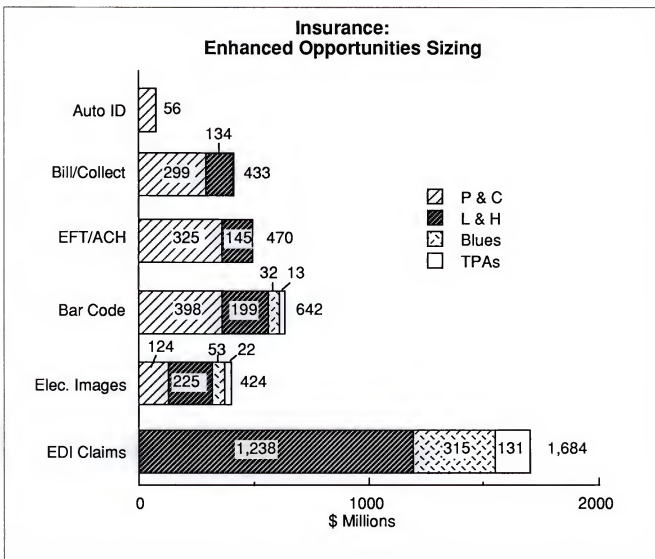


EXHIBIT II-3

**B****Application
Opportunity
Attractiveness**

Exhibits II-4 and II-5 use a standard rating methodology to balance the opportunity size calculated with two other key criteria distilled from the interviews: insurers' willingness to outsource, and INPUT's judgement of their level of "pain" or problem, each with respect to a particular application.

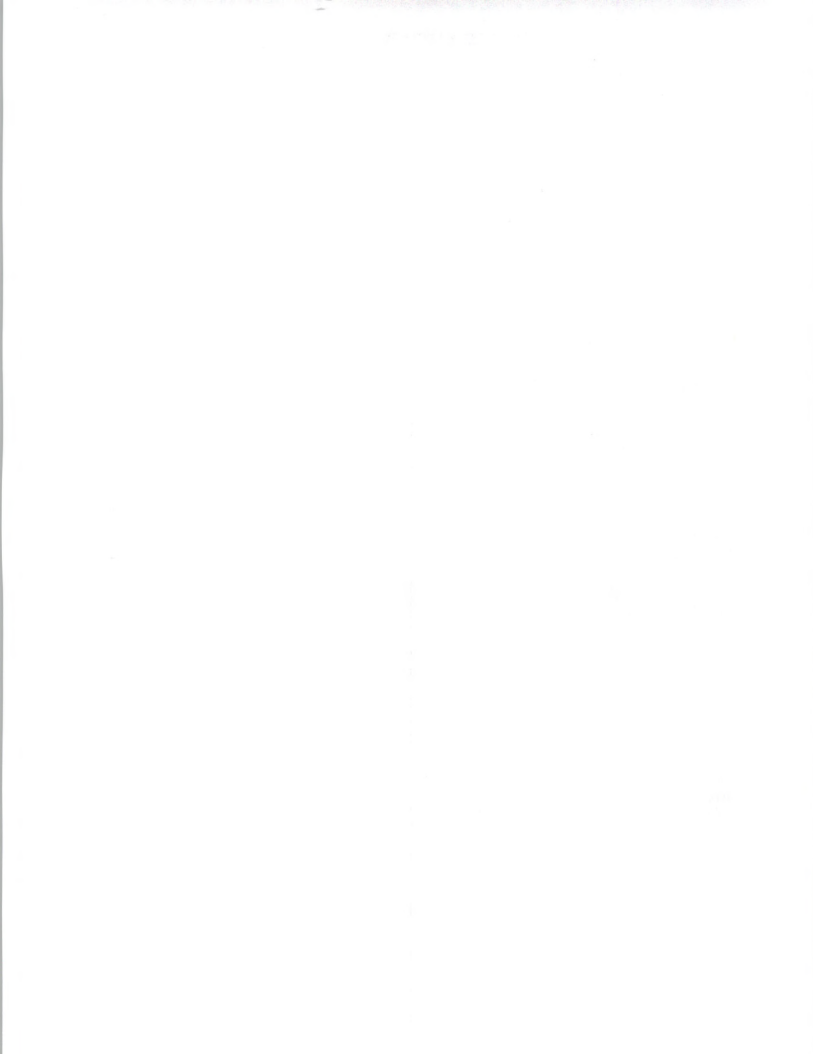


EXHIBIT II-4

**Insurance:
Relative Attractiveness Ratings of
Basic Services Opportunities**

Application opportunity (\$ in millions)		Criteria ratings (range: 1 = negative to IDS, 5 = positive)			Overall attractiveness (range: 1 = lowest 125 = highest)
Type	Size	Relative Size	X Willingness to Outsource	X Level of Pain or Problem	= Relative Rating Value
Policies	\$455	3	1	2	6
Premiums	\$245	2	1	1	2
EOBs with checks	\$187	2	2	3	12
Total basic	\$887				20

As shown, a five-point rating scale is applied to each criterion, where a "1" indicates a criterion that is negative to Moore IDS's interest in winning—or likely ability to win—such business, while a "5" shows a very positive criterion. By rating each of the criteria and then multiplying the ratings (the multiplication shown in the tables as "Relative Size X Willingness to Outsource X Level of Pain or Problem"), the product is a "Relative Rating Value" that represents the overall attractiveness to Moore IDS, doing so in a fashion that combines the quantitative opportunity-volume sizing with the other two essentially qualitative criteria.

This analysis indicates that larger opportunities are not necessarily more attractive, and that those of roughly equal size can have very different levels of attractiveness. It is noteworthy that the enhanced (IS-based) opportunities for Moore IDS in the insurance industry are rated over eight times more attractive than basic services currently offered to this vertical market (168 versus 20 total rating points).



EXHIBIT II-5

**Insurance:
Relative Attractiveness Ratings of
Enhanced Services Opportunities**

Application opportunity (\$ in millions)		Criteria ratings (range: 1 = negative to IDS, 5 = positive)			Overall attractiveness (range: 1 = lowest 125 = highest)
Type	Size	Relative Size	Willingness to Outsource	Level of Pain or Problem	Relative Rating Value
Auto ID	\$56	1	1	2	2
Bill/Collect	\$433	3	1	1	3
EFT/ACH	\$470	3	3	2	18
Bar Code	\$642	3	1	3	9
Elect. Images	\$424	3	4	3	36
EDI Claims	\$1,694	5	5	4	100
Total Enhanced	\$3,719				168

C

**Target Audience of
the Enterprise Served**

Exhibits II-6 and II-7 organize opportunity size and attractiveness measures by the target audience of the applications considered. While this is done for purposes of later cross-industry analysis at the conclusion of INPUT's research project, it is noteworthy now that the dominant applications in the insurance industry deal with customer communications.



EXHIBIT II-6

**Insurance:
Opportunity Size by Target Audience
(\$ Millions)**

Type of Service	Target Audience					Total
	Owners	Employees	Customers		Suppliers	
A. Basic			Business	Consumer		
			Policies			
			(455)			
			Premiums			
			(245)			
			EOBs			
			(187)			
Subtotal			(887)			(887)
B. Enhanced			EDI	EFT/ACH	Bar code	
			Claims	Collection	(642)	
			(1,694)	(470)		
				Billing/	Electronic	
				collection	imaging	
				(433)	(424)	
				Auto ID cards		
				(56)		
			(1,694)	(959)	(1,066)	(3,719)
Total			(1,694)	(1,846)	(1,066)	(4,606)

**Insurance:
Opportunity Attractiveness by Target Audience
(Attractiveness Rating Scores)**

Type of Service	Target Audience					Total
	Owners	Employees	Customers	Suppliers	Internal Efficiency	
A. Basic			Business	Consumer		
			EOBs			
			(12)			
			Policies			
			(6)			
			Premium			
			(2)			
Subtotal			(20)			(20)
B. Enhanced			EDI	EFT/ACH	Electronic imaging	
			Claims	Collection		
			(100)	(18)		
			Bill/collect			
			(3)		Bar code	
			Auto ID		(9)	
			cards			
			(2)			
			(100)	(23)	(45)	(168)
Total			(100)	(43)	(45)	(188)



D

New Sales and/or
Delivery Mechanisms
Required

A wide range of new sales and delivery mechanisms will be needed for Moore IDS to offer enhanced services.

EXHIBIT II-8

**Insurance:
New Sales and Delivery Mechanisms Required**

Opportunity	Sales Expertise	Printing Equipment	Information Technology	Alliances/ Acquisitions
P&C Policy	(None)	(None)	Expert systems software	Policy Mgmt. Systems Syntelligence
Auto ID	(None)	(None)	(None)	Equifax
Bill/Collect	Lockbox Info	(None)	Lockbox accounting and reporting systems	Lockbox vendor(s)
EFT/ACH	EFT/ACH info Service bureau	(None)	EFT/ACH network connections EFT/ACH processing Service bureau accounting	EFT/ACH gov't. authorities EFT/ACH service bureau(s)?
Bar Code	Bar code filing systems	(None)	Imaging data-to-bar code	Bar code filing vendor(s)
Elec. Images	Electronics filing systems	(None)	Imaging data-to-electronic file	Kodak Filenet Wang Xerox IBM/Image Systems Corp.

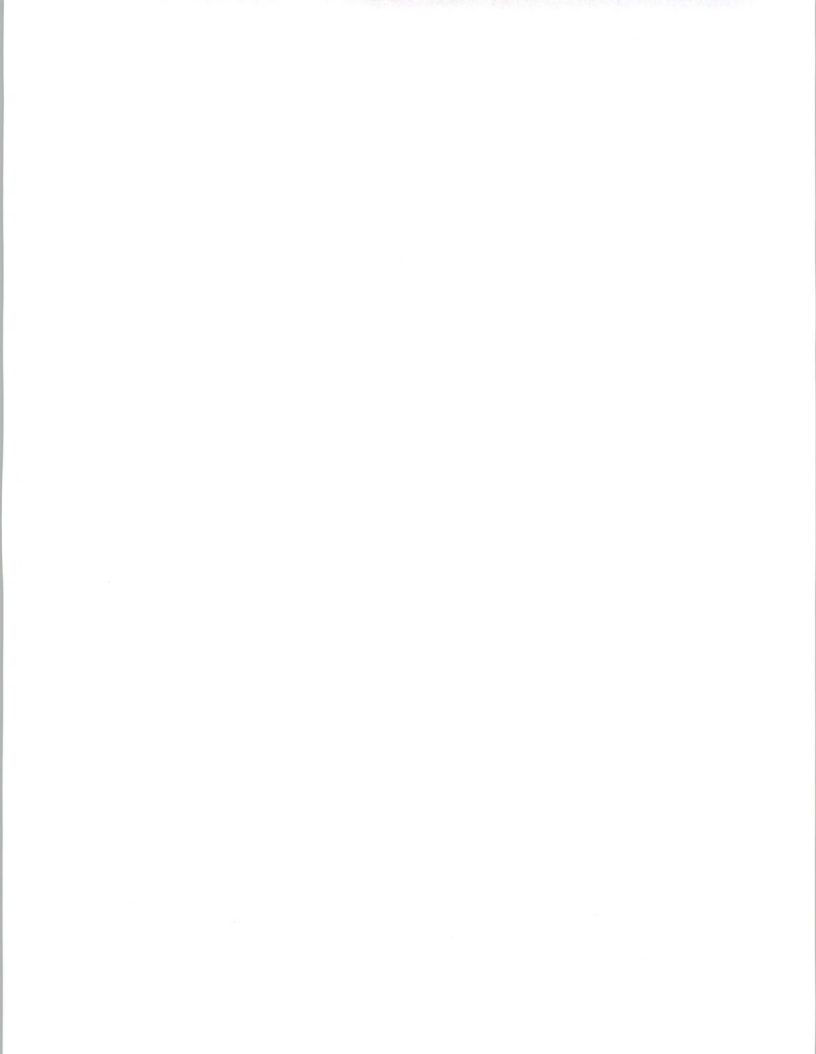


EXHIBIT II-8 (Cont.)

**Insurance:
New Sales and Delivery Mechanisms Required**

Opportunity	Sales Expertise	Printing Equipment	Information Technology	Alliances/ Acquisitions
EDI Claims	EDI information Health claims information Service bureau	(None)	EDI translation/ store-and-forward Service bureau accounting	National Electronic Information Corp. IBM/ACORD/ IVANS AT&T Geisco Tymnet PCS Inc. ARC/AMS (Agency Management Systems) Wallabee Corp. Blue Cross of S. Carolina Electronic Data Systems Computer Sciences Corp. National Data Corp. Equifax Policy Mgmt. Sys. Aetna

Opportunity-specific new information services technologies required for the enhanced service opportunities are identified, and a wide range of potential firms for alliances and/or acquisitions are noted.



In addition to application-specific sales expertise, these enhanced services will require a conceptual "solution sell" to a higher organization level than is Moore IDS current practice.

E

Threats and Opportunities

Exhibit II-9 lists a number of environmental threats and opportunities relevant to the applications outlined above for the insurance industry. A postal rate increase and general trend in outsourcing DP functions are noted as having the most significance for Moore IDS.

EXHIBIT II-9

Insurance: Environmental Threats and Opportunities

- Threats
 - Industry-directed public anger may increase regulations
 - Push for national health insurance may paralyze L&H segment, perhaps for years of transition (5-10 years off?)
 - Increasing pressures on profitability
 - Life insurance becoming less profitable, segment is shrinking.
 - Likely increased rate of insurer insolvencies
 - Increasingly, insurers self-insure (negative for L&H, Blues)
 - Postage may rise 25% in 1991
- Opportunities
 - Outsourcing of DP functions is increasing; for example: Kodak contract with IBM (all industries)
 - Angry policyholders are now increasing claims volumes substantially
 - More and more states require auto insurance IDs
 - Increasingly, insurers self-insure (positive for TPAs)

F

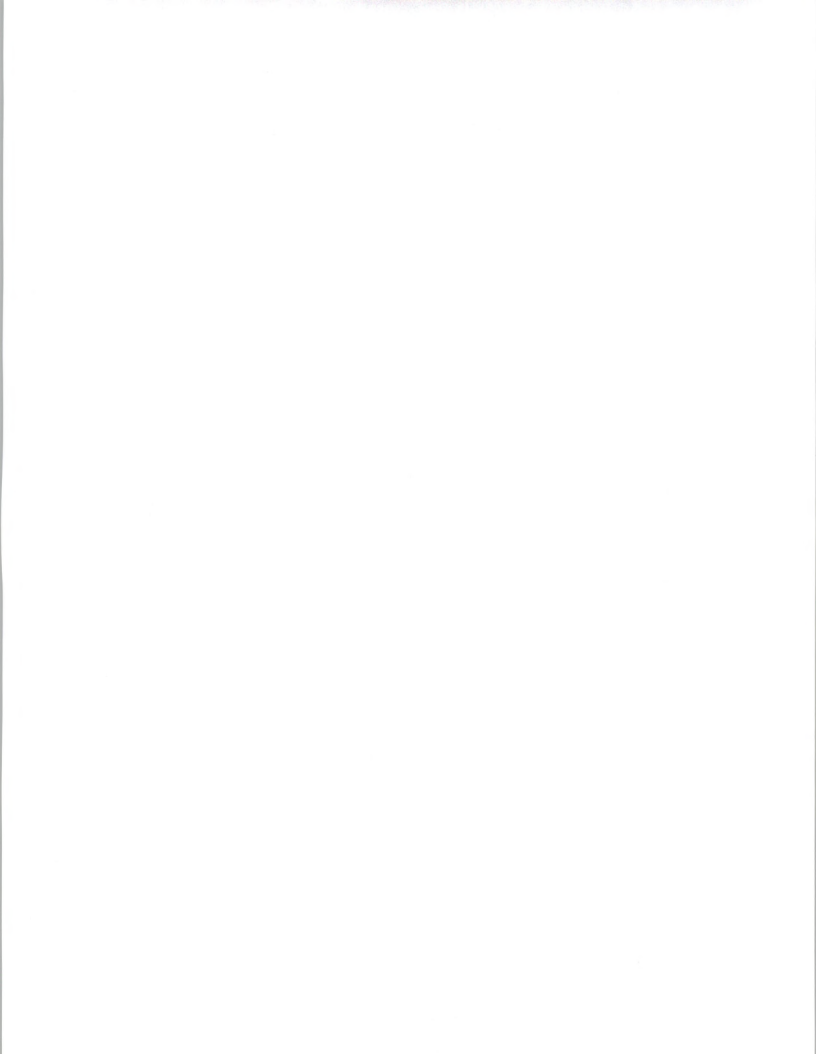
Competition

According to those interviewed, there is little use of outside vendors for these types of applications. The critical competition for Moore IDS—both in terms of new sources for current basic applications, and in terms of advancing into some of the enhanced service opportunities—is the in-house organization. Both large and mid-sized insurers in most cases have

upgraded variable-image printing to laser printer capabilities in the last few years, have succeeded in this upgrade, and are not interested in seeing that success or their reputations challenged by an outside vendor like Moore IDS.

The exception is the Blues, where EDS has been relatively successful in taking over such operations, often on a facilities management basis.

Additional enhanced services competition is likely from alliance/acquisition targets listed in Exhibit II-8.





Market Opportunities







Market Opportunities

Several leading application opportunities for Moore IDS have been identified.

Before discussing these opportunities, however, it will be useful first to set the stage by summarizing findings about outsourcing by insurers today, as well as interviewees' expressed attitudes about future outsourcing and their descriptions of problems they now face or improvements they wish to make.

A

Introduction

Findings about outsourcing are remarkably consistent among the insurers interviewed.

EXHIBIT III-1

Insurance: Outsourcing Today

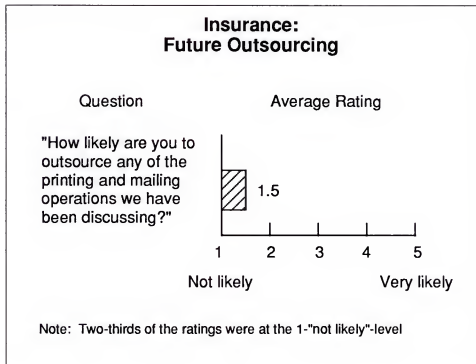
- Several outsource W-2s and 1099s
- Only 1 in 25 interviewed now outsources other variable-image printing and mailing
- Some Blues contract with EDS for facilities management

Only a few of the 25 insurers interviewed report outsourcing their yearly W-2s and 1099s; many others now handle this effectively on laser printers. Significantly, among the 25 insurers and TPAs interviewed, only one

reports significant outsourcing of the massive volumes of variable-information-content business communications that insurers print and mail daily. Several Blues report contracting with EDS for on-site facilities management of their own operations.

When questioned about the future, as Exhibit III-2 shows, respondents are equally unenthusiastic.

EXHIBIT III-2



A very low perceived likelihood for future outsourcing is clear in these figures.

Reasons against outsourcing are summarized in Exhibit III-3 and discussed in detail below.

Among those surveyed, the vast majority (19 of 25 interviewed) handle some or most variable-image printing with high-capacity in-house laser printers, either the Xerox 9700 series or the IBM 3800 series. A number have implemented Documerge™ software to control the lasers, at least for the policy-printing function. Computer-output impact printing has receded to minority status. Given the very successful transitions to lasers that most report, interviewees indicate that printing operations are generally smooth and costs relatively low. (A number do use outside ZIP-sorting houses to achieve quantities that qualify for ZIP-plus-4 discounts.)



EXHIBIT III-3

**Insurance:
Reasons Against Future Outsourcing**

- Most (19 of 25) have multiple large laser printers
- In-house operations are smooth, especially printing
- Costs are low
- Unclear: Is "outsourcing" equated with job-shopping to a local printer/laser print shop?
- Some senior executives (6 of 25): "I'll listen to any proposal to save money"
- Valuable: "Control" and "service to policyholders"
- Implicit: Lasers are major corporate and personal investments
 - Most plan to add more in 1 to 3 years
 - Few would want the wisdom of in-house lasers questioned
- No interest in facilities management (except Blues)

Many interviewees state specifically that they believe an outside vendor would be more costly to them than current in-house operations. It should be noted that the structure of the interview may have permitted interviewees to regard local job-shop printers equipped with laser printers as outsourcing, so this could have skewed the results toward the negative as to perceived-higher costs for outsourcing, and as to negative views of likely service levels.

(Note also that many TPAs are divisions of major insurers; such a TPA should enjoy major cost economies by "piggy-backing" on the insurer's excess operational capacity.)

On the other hand, 6 of the 25 persons interviewed (almost 25%) are executives or managers who assert that they will consider any cost-saving proposal, although several of them are very skeptical that an outside service could match their in-house cost economies.



Insurers repeatedly cite their need to control such operations on an in-house basis, especially to assure highly competitive service to policyholders. Although never stated explicitly, the interviewer believes that another factor is implicit behind such statements. Major corporate investments in multiple laser printers represent substantial financial commitments that now appear to be paying off in traditional productivity measures; more such investments now appear to be routinely planned over the next few years, according to interviewees. Few executives or managers responsible for these investments care to have the wisdom of such personal/corporate commitments questioned, yet serious consideration of outside services for the same functions would invite just such questioning.

Similarly, an "I'm doing fine thank you" attitude characterizes a near-universal lack of interest in facilities management. The Blues represent an exception to this finding. Some of the Blues contract with EDS for facilities management, some have banded together to jointly manage their facilities through a shared independent business unit, and one Blue reports providing facilities management services for a number of the other Blues.

A possible marketing "wedge" for Moore IDS might be high-level financial-executive sales calls asking what the insurer expected to spend for new laser printers in the next 1 to 3 years, and proposing that outsourcing one or two applications to Moore IDS might permit normal growth in the other applications to be absorbed with currently installed lasers, avoiding costly new capital investments.

INPUT intended (late in the interview questionnaire) to ask those willing to outsource just how important it would be for the printing and mailing facility to be physically close. Given that virtually all interviewees repeatedly and consistently expressed their unwillingness to outsource, however, the question became impossible to ask within almost all interviews, if the interviewer was to maintain credibility as a listener to the interviewees—they had already said quite clearly that they were not interested in outsourcing. Thus there are no findings on this question.

Exhibit III-4 lists significant problems that interviewees cite, and desirable improvements.

Over one-third (9 of 25) of the insurers interviewed report no significant problems in their variable-image printing and mailing of business communications, often reflecting their satisfaction with relatively recent implementation of laser printing for policies, premium notices, and/or EOBs with checks.

Several P&C insurers cite their success with laser printing of Personal P&C policy documents as reason to hope they can do likewise with

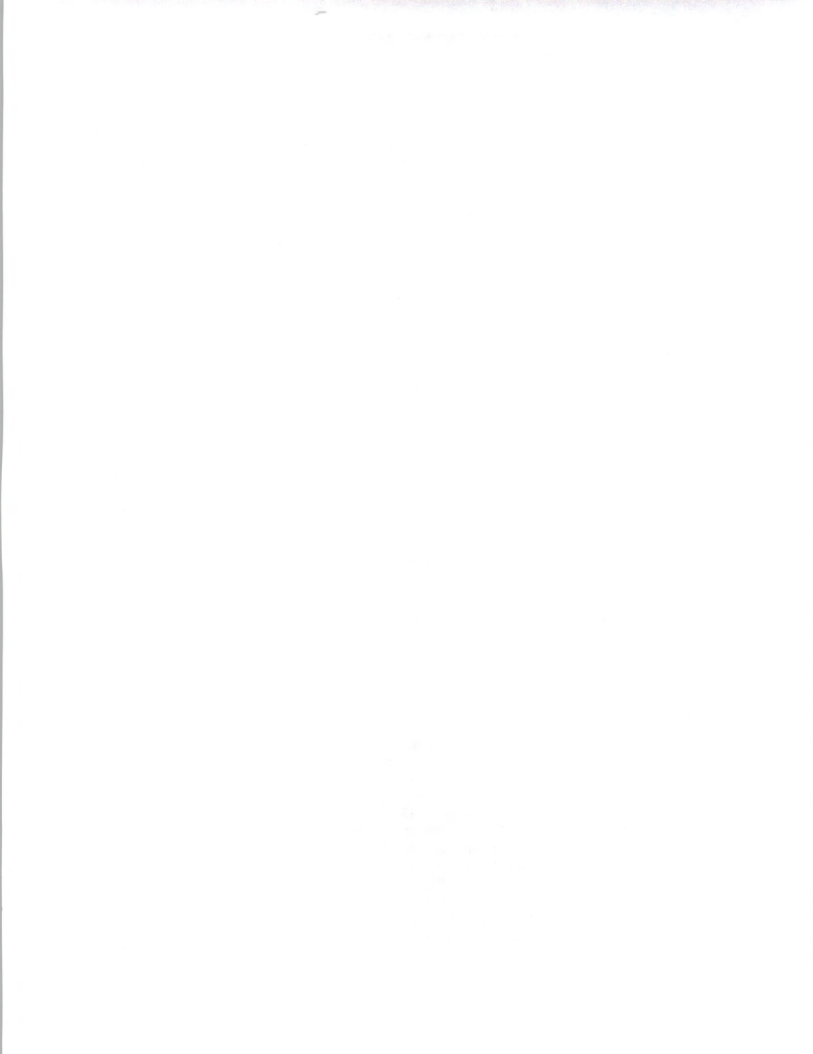


EXHIBIT III-4

**Insurance:
Problems and Improvements Identified**

- One-third (9 of 25) say, "All is well, no problems..."
- "As we have with simple Personal P&C policies, next let's laser print complex Commercial P&C policies"
- "We should do all printing on the lasers"
- "We cannot laser print checks without the MICR option"
- "Separate print runs for EOBs and checks require costly matching for mailing, or extra mailings"
- "Fast and cheap laser printing is out of step with slow and costly folding, stuffing, and mailing ... and why can't the systems be physically connected?"
- "EFT is great, we should use it more"
- "What about EDI for health claims, versus paper?"
- "Too much paper and mail to track, keep up with"
- "It's sometimes tough to get the information we need for printing from old software and/or multiple systems"

Commercial P&C policy documents. (Note: Most P&C insurers handle a mix of Personal P&C business—mainly homeowners and automobile insurance—and Commercial P&C accounts—large or small corporations or other organizations that need fire/flood property coverage and injury/other-liability casualty insurance.) This hope is tempered, however, by the realistic realization that Commercial-lines policies are significantly more complex and subject to a high degree of case-by-case customization (of forms, schedules, enclosures, etc.). Thus interviewees recognize that major programming hurdles will need to be cleared in order to be able to feed an appropriate data stream to laser printers for these documents. Based on related insurance industry software experience, INPUT notes that this may prove even more complex than the interviewees realize, perhaps requiring state-of-the-art expert system software solutions that may take years to implement.



Many interviewees envision doing much more printing on lasers. They note, for example, that only the expense of implementing the MICR (micro printing) option on the laser printer is stopping them from using it for check printing, especially where the check and EOB are printed on a single piece of paper. This would clearly reduce costs for some, who now must match EOBs and checks from separate print runs or mail them separately.

B**Leading Application Opportunities****1. Basic Services Opportunities**

EXHIBIT III-5

**Insurance:
Characteristics of Key Basic Applications**

- Policies
 - Length of 1 to 3 pages, mostly
 - Daily print runs
 - Concentration in Personal P&C
 - Mixture of new-business items and annual renewals
- Premium Notices
 - Length of 1 page in almost all cases
 - Daily print runs
 - Over half in Personal P&C, most others in Life
 - Little in Health, as it is mostly Group Health
 - Mixture of initial, monthly, quarterly, and annual notices
- EOBs
 - If laser printed, mostly check on 1 page with EOB
 - Some cases: EOB and check printed separately, then merged
 - Daily print run
 - Mainly for Health benefits
 - Daily volume determined by volume of claims
 - Note: Claims volume is rising industry wide



Looking across the the three leading basic applications, two key shared characteristics are noteworthy: most documents are very short (even for policy printing, in this interview sample) and all are run on a daily basis (see Exhibit III-5).

a. Policy Printing Opportunities

Focusing first on the printing and mailing of policy documents, INPUT finds limited—and tough-to-implement—opportunities in both the P&C and L&H lines of insurance (see Exhibit III-6).

EXHIBIT III-6

Insurance: Limited Opportunities in Policy Printing

- Recipients: Customers of the insurer
- Personal P&C and L&H: Policy printing handled well now in-house, mostly on laser printers
 - Note: No variable printing for Group Health (the vast majority of Health)
 - Overall, the opportunity for Moore IDS is limited
- Blues and TPAs: Generally do not variable-image-print policy documents
 - No Moore IDS opportunity
- Commercial P&C: Insurers want to laser print, complexity and customization have stopped them
 - Possible Moore IDS opportunity
 - Danger: Management of the software costs, partnerships required, complexity, and risks

In all cases, the recipients of policy printing are the insurer's customers, the policyholders.

Most P&C and L&H insurers interviewed are very satisfied with their relatively recent implementation of laser printing for variable-image policy documents mailed to policyholders. These implementations are for Personal P&C and non-Group-Health L&H policies.

Personal P&C policies are generally 1 to 3 page documents that integrate policyholder-specific information with standard policy terms and formats.



Where Personal P&C laser printing is not yet implemented, insurers generally are still satisfied with impact-printed "dec" (for declaration) pages attached to policy-terms booklets and/or selected preprinted sheets; alternately, they want to avoid the cost of investing in laser printers.

Group Health policies generally are handled with issuing of bulk-printed group-terms booklets; outside of group coverages, most L&H insurers report they have already implemented laser printing for their short (usually 1 page) documents.

Overall, this high level of satisfaction with new in-house, laser printer-based solutions means that the market opportunity for Moore IDS in Personal P&C and L&H policy printing is limited, in part for the reasons cited earlier in the discussion of outsourcing (see Exhibit III-3).

Blues and TPAs generally do not print policies on a variable-image basis, so are not targets for Moore IDS.

Many P&C interviewees express the desire to replicate their success in printing Personal P&C policies (for automobile and homeowners insurance) with Commercial P&C policies, but none say they know how to do this yet. The complexity and item-by-item customization required for Commercial P&C policies is the obstacle to such computer-implemented laser printing. Currently, an expert-intensive process requiring the skills of professional-level underwriters and experienced administrative assistants is used to generate most Commercial P&C policies. This is a semi-manual, error-prone process that still largely defies computerization of enclosures such as "dec" pages, multiply-selected and highly-variable attachment pages of terms, schedules, endorsements, and more.

To seize the Commercial P&C policy-printing opportunity, Moore IDS would need to make a multi-year commitment to the development of a new generation of expert system-assisted printer-control software, presuming that these development costs could then be leveraged over sales to a number of insurers. Partnerships with leading insurance software policy-processing software vendors, such as Policy Management Systems, likely would be required to assure compatibility with many existing back office software systems. Even then major risks would remain, such as: (1) insurers' unwillingness to accept an outsourced solution over in-house operations, (2) company-by-company customization costs, and (3) the need to adapt work pioneered with one policy-processing software vendor to (a) other vendors' software and (b) the many cases in which insurers have built their own policy processing software rather than purchasing a package.

It is thus only with reservations that INPUT recommends pursuing the Commercial P&C policy-printing opportunity: Moore IDS must undertake significant additional study that is outside the scope of this project to validate or eliminate this as an opportunity.

b. Premium Notices Opportunities

Focusing next on premium notices, INPUT again finds only limited opportunities (see Exhibit III-7).

EXHIBIT III-7

**Insurance:
Limited Opportunities in Premium Notices**

- Recipients: Customers of the insurer
- P&Cs, L&Hs, and Blues offer only limited opportunities to Moore IDS, because premium notices are now handled well on laser printers
- Little "agency billing"
- EFT/ACH is used for a growing number of L&H policyholders, eliminating the premium notice document
- Complex Commercial P&C premium notices can be 100 pages, including schedules of coverage
- TPAs generally do not issue premium notices

The recipients of premium notices are always the customers of the insurer, the policyholders.

Most P&Cs, L&Hs, and Blues have implemented the laser printing of premium notices over the last 1 to 3 years, and a nearly universal high level of satisfaction is reported by insurers with such implementations. These are often single-page documents, although some are 2 or 3 pages, or are printed two-up or three-up on a page and then cut or burst for mailing.

Such billing directly by insurers is called "direct billing" within the industry. Although no question addressed this, the interviewer is somewhat surprised that no mention was volunteered of the other category of billing, "agency billing" of the policyholder implemented by the field agent. As the agency segment of the industry is outside the scope of this project, it is not clear whether a distinct opportunity exists to serve the needs of the agency billing sector.



On the L&H side, most interviewees already have some experience using Electronic Funds Transfer/Automated Clearing House (EFT/ACH) computer and communication technologies to electronically initiate regular monthly payment transactions on a pre-authorized basis. Life or health policyholders, for example, see the benefit of regular, on-time transfers that preclude lapses of coverage. A related but older technology with much the same result is pre-authorized printing by the insurer of a check-like draft against the policyholder's bank account, for immediate deposit and thus credit to the insurer's account. While EFT/ACH is still a relatively small proportion of total non-Group L&H payments—perhaps 10% or 20%—several interviewees report far higher proportions of new policyholders opting for EFT/ACH-based payment, indicating a higher electronic proportion in the future and thus decreasing premium billings for this segment. In theory this should apply to personal P&C policyholders as well, for regular automobile and homeowners' insurance payments, although no P&C interviewees noted experience with EFT/ACH.

c. EOBs with Checks Opportunities

Finally, looking at EOBs (Explanations of Benefits) sent out, often with checks to pay claims, INPUT finds good opportunities in those cases where laser printers have not already been implemented for this function (see Exhibit III-8).

The recipient of premium notices is always the customer of the insurer, the policyholder.

In the P&C area, interview findings about current approaches to EOBs with checks are inconsistent, ranging all the way from check-off forms to laser-printed, single-page EOBs/tear-off checks with MICR printing; MICR reportedly is critical to implementing this function on laser.

While some L&H insurers report laser printing of EOBs and checks through their Information Systems departments, others report various technologies implemented through a number of other departments, most often Claims.

Two L&H findings on EOBs are highlighted: First, apparently because consumers are angry with rising insurance costs and hold negative perceptions of the industry, policyholders are tending increasingly to file for any possible claim. Thus, insurers report that the number of claims has greatly increased and therefore their quantities of EOBs are up (if not the number of checks), if only to state to a policyholder that a claim is not eligible or the deductible is not yet fulfilled. Second, a concern in the vending out of EOBs and checks is the level of financial control necessary in such a critical "pocketbook" function.



EXHIBIT III-8

**Insurance:
Some Good Opportunities for EOBs with Checks**

- Recipients: Customers of the insurer
- Mixed opportunity for all market sectors, as only some have implemented in-house laser printing
- P&C: Some on lasers, some lag far behind
- L&H: Some on lasers, others have various solutions independent of Information Systems, often in Claims
 - Note: 1989 L&H claims quantities running significantly higher than 1988
 - Concern: Financial control
- Blues: Some on lasers, some still on impact printers
- TPAs: Some on lasers, some still on impact printers
 - Note: 2 of 4 interviewed concerned about handling fast growth

d. Other Less Attractive Basic Applications

With one possible exception, the other basic applications researched all appear less attractive to Moore IDS (see Exhibit III-9).

Note that only 2 of 25 interviewees now use an outside service (Moore IDS, in both cases) for W-2s and 1099s.

ID cards may prove somewhat attractive on further investigation, either for the Blues, who use embossed cards, or for insurers who now operate separate print runs for printed (not embossed) cards and the policy or premium document it is mailed with, creating sorting and matching problems. ID cards are a growing requirement for automobile insurance, as increasing numbers of states require evidence of coverage to be carried; it is unclear whether or not yearly reissues are generally required.

EXHIBIT III-9

**Insurance:
List of Less Attractive Applications**

- Periodic payment checks and statements to agents are less frequent, lower volume, and may not be computerized
- W-2s and 1099s are mostly now on laser printers, and are already a peak-load problem for Moore IDS
- Customer surveys are not regular, often lack variable-image content
- Updates on benefits are found only in L&H (Life category) annual statements of policy values
- Proxies are handled as tear-off portion of other documents
- ID cards generally are handled well by impact or laser printers
 - Possible exception: Blues who use embossed cards
 - Possible exception: Solve problem of merging card-stock-printed run with paper-printed policy or premium document

2. Enhanced Services Opportunities

This section will focus on enhanced application/service opportunities, as defined in Exhibit I-1.

a. Introduction: Current Outsourcing and Future "Fantasies"

Two topics will serve to set the stage for projecting enhanced service opportunities: outsourcing of the front- and back-end functions that surround the central variable imaging function (see Exhibit III-10), and "fantasies" that interviewees have about ideal future systems solutions (see Exhibit III-11).

EXHIBIT III-10

**Insurance:
Current Outsourcing of Enhanced Applications**

- Virtually no outsourcing of front-end information systems applications
 - Exception: A number of Blues contract with EDS, often for complete facilities management of DP
- Many outsource just the back-end collection function, through lockbox services
 - Receive a daily computer tape of transactions

With the exception of the Blues, most interviewees seem to jealously guard the in-house information systems functions that provide the front-end data source for variable imaging; even the Blues guard it somewhat, keeping it in-house but often contracting with EDS to manage it on a facilities management basis. However, it should be noted that many interviewees are information services professionals with "turf" to protect.

On the back end, lockbox collection services are relatively common, featuring rapid bank deposit and daily delivery of computer tapes of transactions to information systems.

A rich field of enhanced application ideas is found in interviewees' fantasies about what they would love to see—irrespective of "do-ability," they were told by the interviewer, or what might seem wild and crazy from today's perspective—roughly five years from now.

In the most widely-shared fantasy (expressed in many variations), insurers see themselves eliminating most paper mailings, moving away from their current status as paper/mailing factories, and just transferring information as needed. This fantasy includes wide use of Electronic Funds Transfer/Automated Clearing House (EFT/ACH) from and to policyholders, both for automatic monthly premium payments and perhaps also for electronic claims payments either to policyholders or to hospitals, clinics, and doctors. Agents' commissions could be paid electronically, as well.

Similarly, several interviewees would like to have electronic communication with agents and branch offices for both policy submission and inquiries about an insured's status or a claim. In fact, the expressed fantasy of electronic claims filings from doctors' computers and from group-health administrators using computers at employers' locations is at

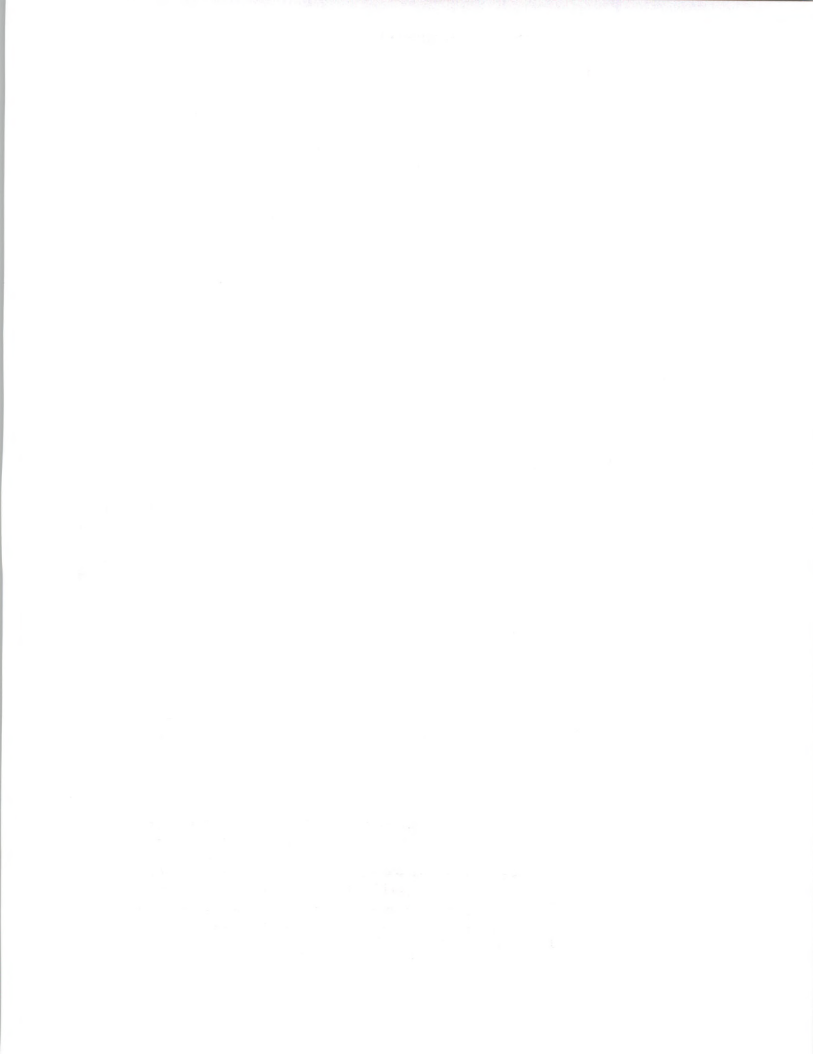


EXHIBIT III-11

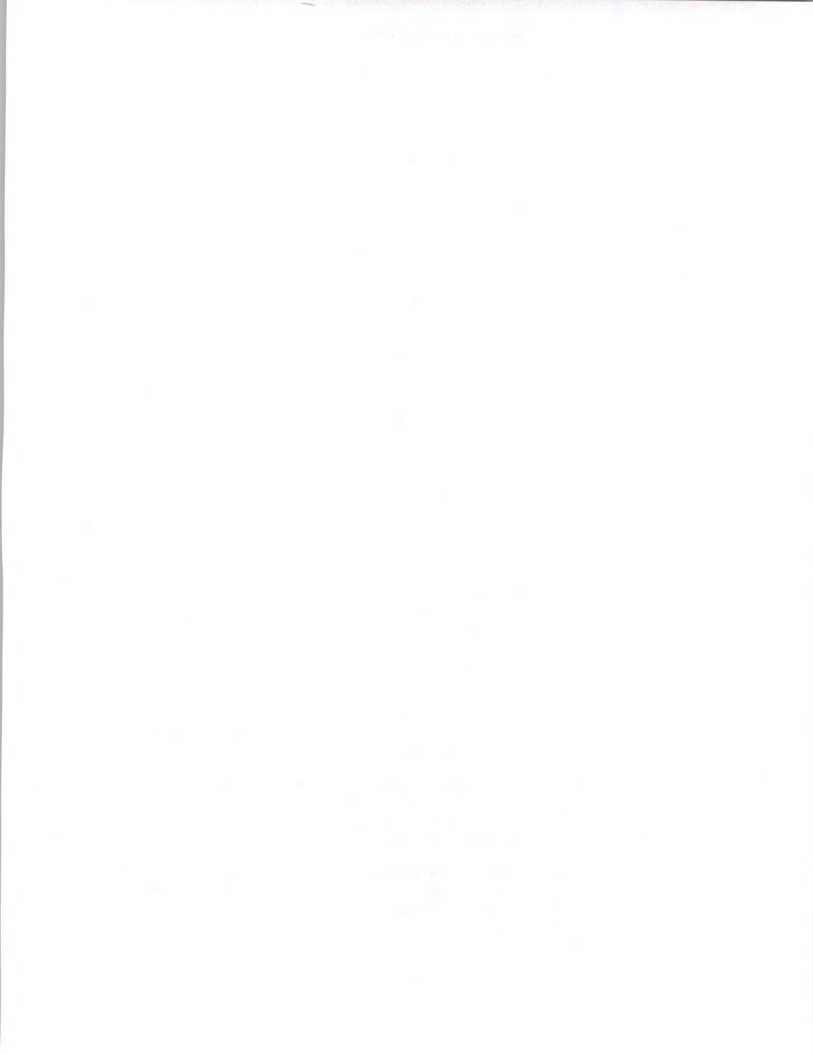
**Insurance:
Interviewees' Five-Year "Fantasies"**

- Many say: "Cut many/most paper mailings"
- "Full automation of commercial P&C policy printing and mailing"
- "Totally hands-off mailing operations, all automated"
- "Easy, central access to all information for printing"
- "Network-connect offices to shift and balance print loads"
- Only 1 of 25: "Contract out all printing and mailing"

least in part a reality today: Wallabee Corp. in New Jersey provides such software now to one of the Blues interviewed. Going one step further, one Blue sees "smart" health insurance ID cards—with the intelligence embedded in the form of an on-card computer chip—eliminating the need for paper-based claims filing; they report that Blue Cross of Maryland now uses such a system.

One interviewee wants to build on increasingly successful experiences in handling policyholder changes over the telephone—often using toll-free 800 numbers—thus decreasing the forms used, the flow of mailings in and out, and other paperwork.

"Full automation" fantasies take several forms. A few hope to see a new generation of computer-based Commercial P&C policy printing and mailing, with no custom typing and no errors—as they have achieved with Personal P&C policies. Some wonder about achieving totally hands-off mailing operations, all automated with no human handling, yet they are clearly thinking of achieving this in-house, not vending out. Several wonder when they will see documents come off the laser printer and into the envelope automatically, including any stuffing still required, with capabilities for custom printing like those offered by the Docu-merge™ software.



Taking this hands-off approach to its logical conclusion, one interviewee sees the process starting with a single human keyboard entry at a field-agent office, especially for "direct writers" who have agencies they control in the field. Whether for new business or for a policyholder change, this single keyboard entry would automatically initiate an electronic communication with the insurer's computer, coordinating related activities such as the ordering of electronic MVRs (automobile motor vehicle department reports of accidents and tickets) or similar reports, the updating of files, and automatic printing and mailing of documents as required. In this fantasy, the result is 24-hour turnaround to the policyholder on most changes and inquiries for quotes, achieving a major service/sales-responsiveness competitive edge.

Electronic access is the key to two other fantasies. One interviewee envisions complete centralization of—or easy, uniform access to—all the information required for all variable printing. This is now spread among too many systems with different access schemes and limitations. Another (a TPA with far-flung operations) wants to network all offices to decentralize printing and mailing operations, and to be able to shift printing among offices to balance variable loads.

Alas, only one of 25 interviewees spelled out the Moore IDS dream: "All such printing and mailing is entirely contracted out, and I worry about the insurance business and not the printing and mailing business."

b. Enhanced Service Opportunities Overview

With that introduction, a wide range of enhanced service opportunities is summarized in Exhibit III-12.

Exhibit III-12 provides a graphic representation of a wide range of enhanced service opportunities open to Moore IDS. See the next several exhibits for detailed explanations of each opportunity and their "branches of the tree" interrelations.

As the only extended category of opportunity (see Exhibit I-2). The Auto ID Cards application (Exhibit III-13) stands out, first because Moore IDS can use current printing-on-plastic-card technology (without embossing) to provide the service, without new investment.

Second, further investigation by Moore IDS may determine that it is particularly attractive because increasing numbers of states are now requiring motorists to carry proof of insurance coverage. These ID cards may need to be updated yearly, possibly at the coverage's anniversary date. The latter has not been confirmed by INPUT and thus will require further investigation by Moore IDS on a state-by-state basis.

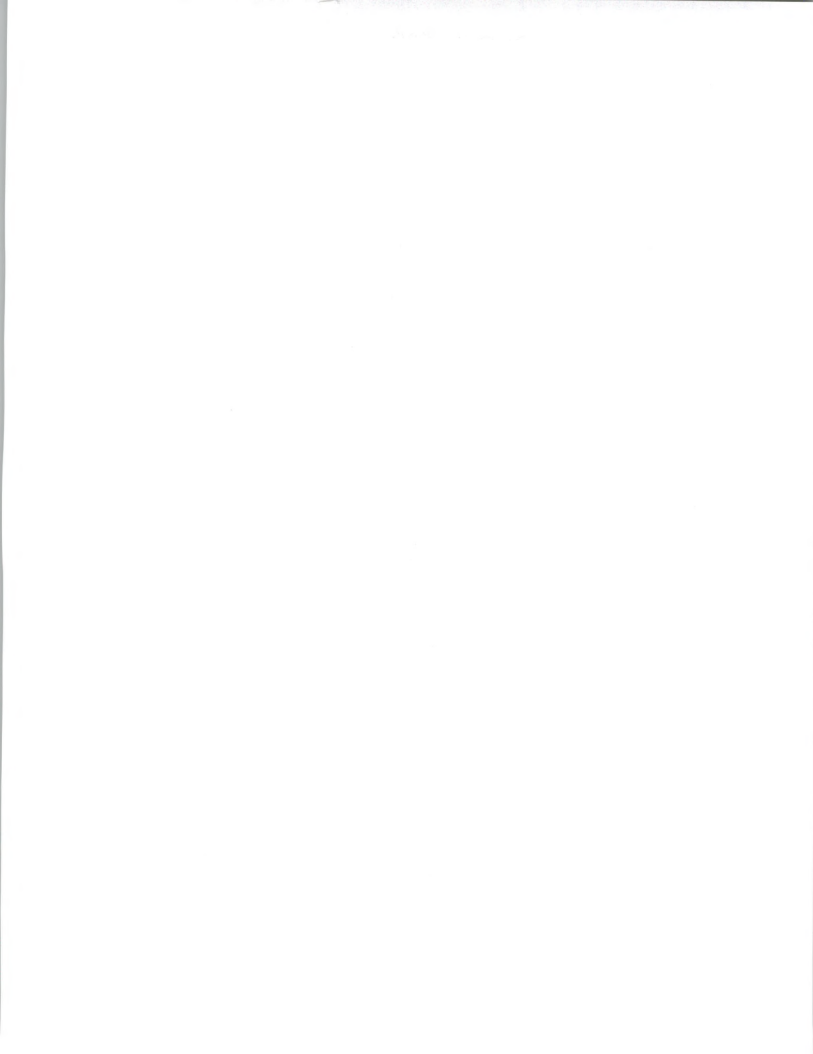
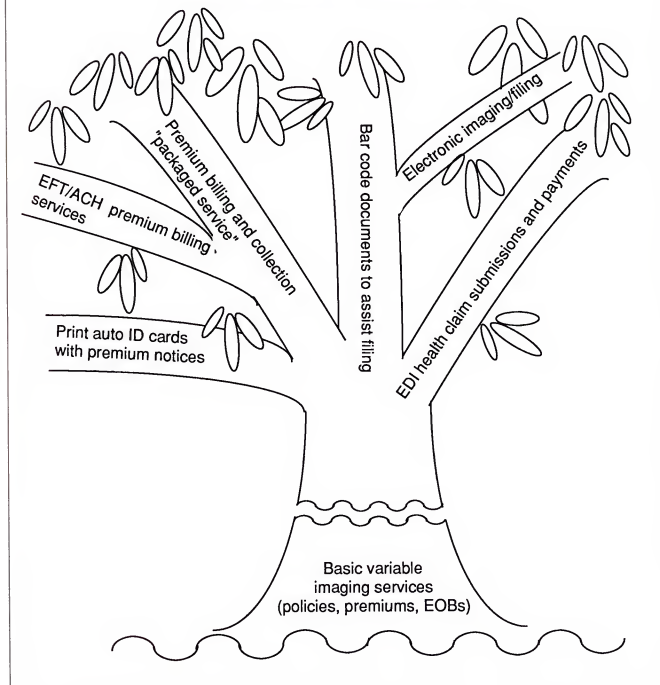


EXHIBIT III-12

Insurance: Enhanced Services Opportunities



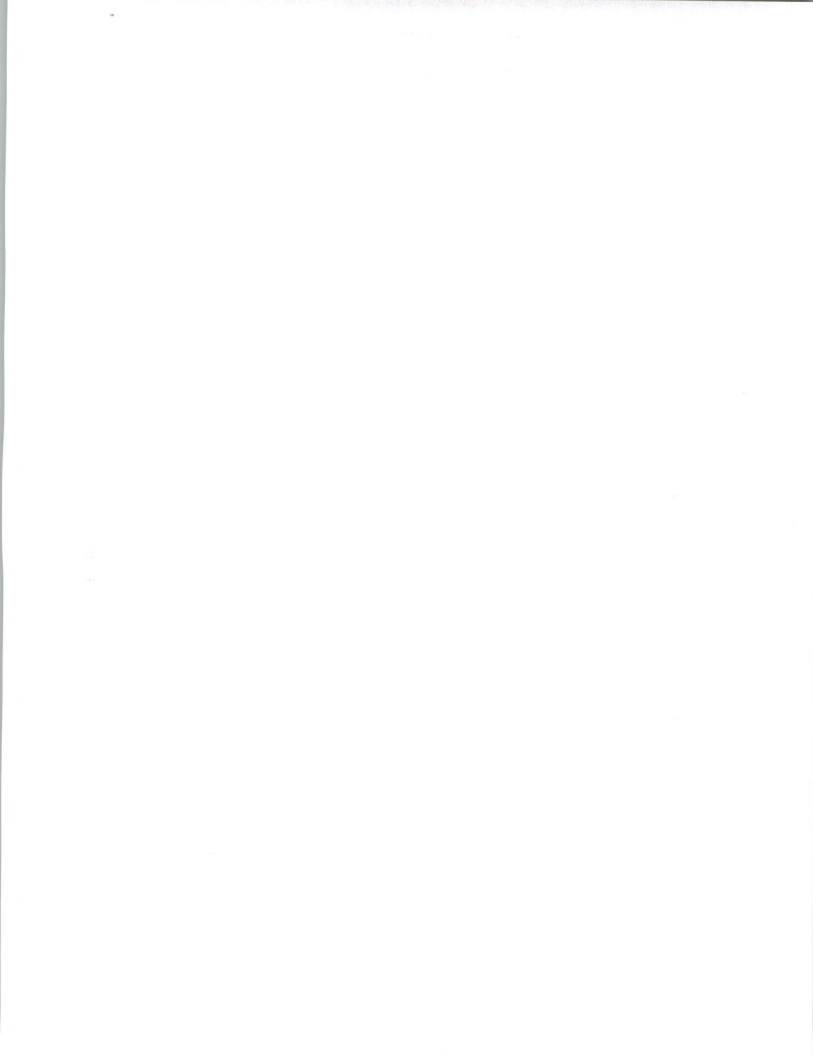


EXHIBIT III-13

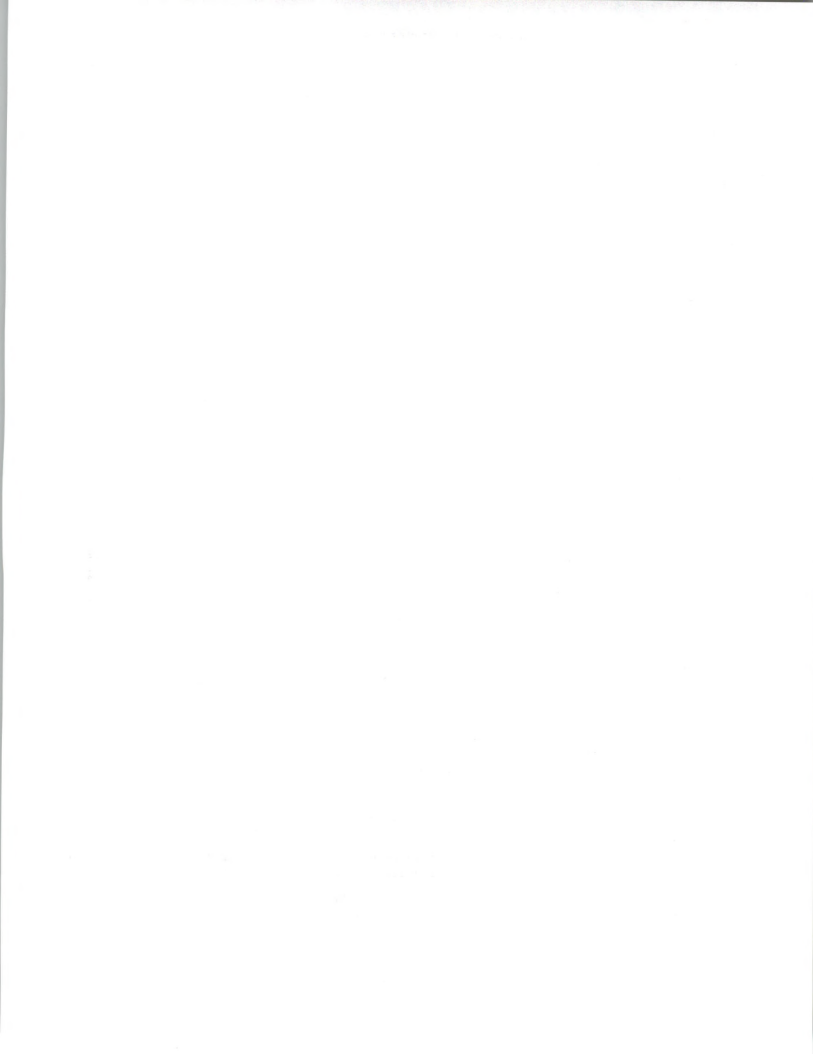
**Insurance:
Top Priority—Auto ID Cards**

- Opportunity: Print ID cards with automobile premium billings
- Today's problem, for some P&C insurers (Personal P&C lines, especially automobile insurance): Merging of separate print runs, card stock for ID cards vs. paper for associated policy or premium notice documents
- Moore IDS solution: Use multi-web capability to automatically assemble corresponding plastic-card-printed and paper-printed documents
- Requires: Daily electronic transmission (or tape transfer) from insurer to Moore IDS of appropriate data and any special instructions
- Benefit to insurer: Cut sorting, assembly, and stuffing costs required to mail card and papers to a policyholder

EXHIBIT III-14

**Insurance:
Secondary Priority—
Packaged Billing and Collection**

- Accept electronic transmissions—from insurer's computer to Moore IDS—of daily premium billing information
- Moore IDS provides printing and mailing
- Moore IDS/lockbox partner provides receipt and deposit of payments
- Moore IDS/lockbox partner provides electronic transmission to insurer of daily collection/deposit information (provided in the data format required by the insurer's accounting system)

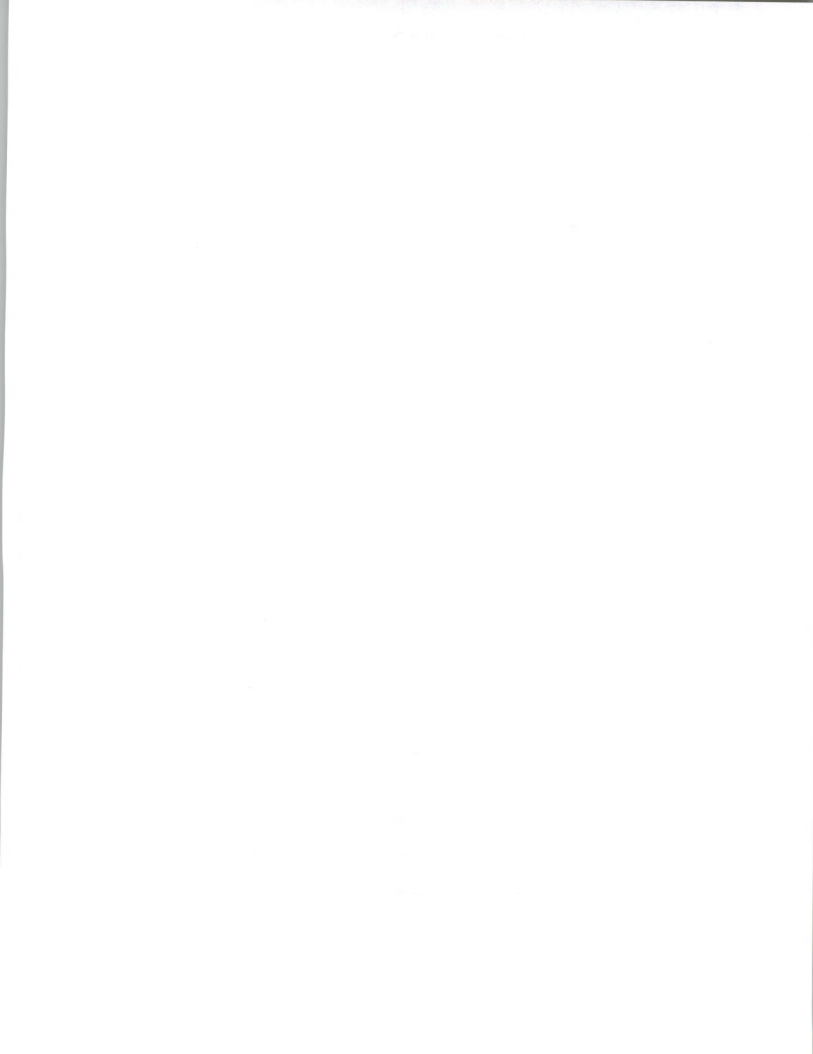


The logic behind the Packaged Billing and Collection opportunity (Exhibit III-14) is that insurers interviewed are quite satisfied with current in-house premium billing operations and thus generally will not choose to outsource these alone, barring a Moore IDS price advantage that is unlikely because of in-house laser printers. By packaging such billing with the back-end lockbox collection, deposit, and reporting functions, however, Moore IDS offers the insurer a total solution that transforms premium billing into a hands-off, all-electronic "billing data out and payment credit in" function.

EXHIBIT III-15

**Insurance:
Secondary Priority—
EFT/ACH Electronic Premium Billing**

- Insurer makes a single daily electronic transmission of premium billing information to Moore IDS (who perhaps works with an EFT/ACH partner)
- Several service options, as appropriate to the status of each policyholder
 - Service option: Automatic EFT/ACH debit
 - Service option: Pre-authorized check printing and forwarding to the bank for immediate credit to insurer's account
 - Service option: Printing and mailing of a premium-billing paper document, and lockbox collection service
- Assumes Moore IDS partnership with/integration into EFT/ACH networks and facilities
- Assumes Moore IDS consulting (as required) to help insurer inaugurate such electronic services
- Assumes Moore IDS management of the policyholders' instructions for EFT/ACH or draft printing
- Note: Would fit well with "Packaged Billing and Collection" opportunity, above.



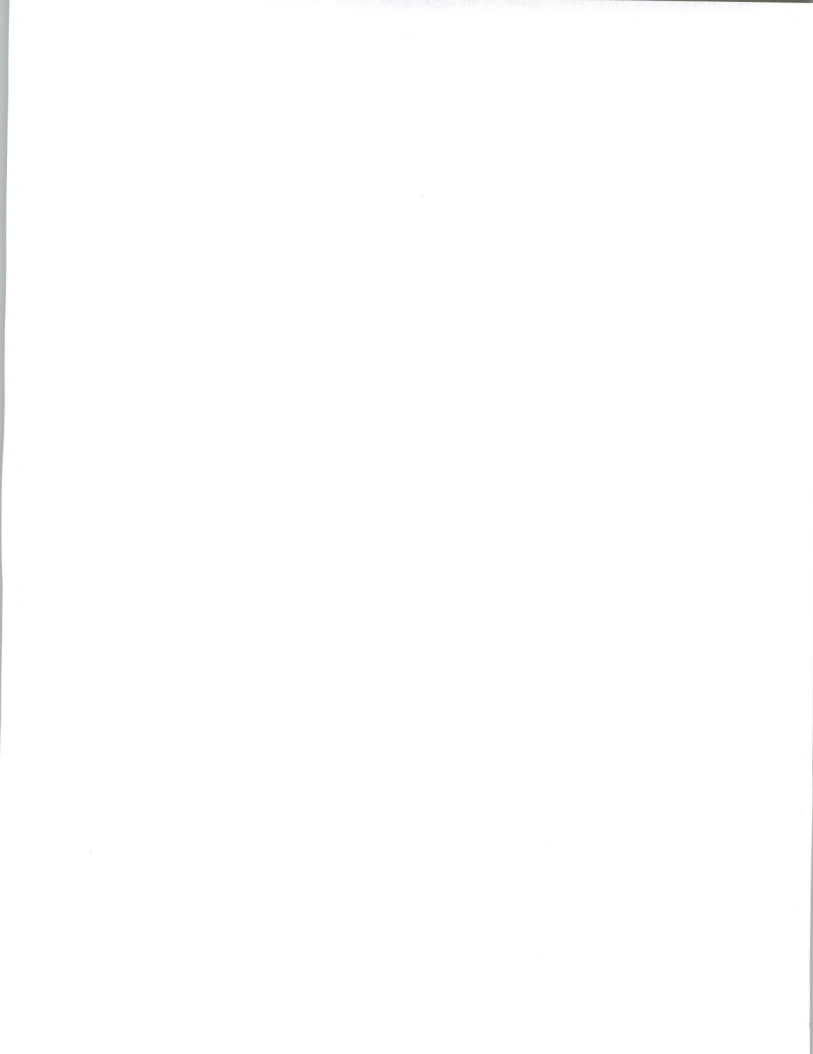
An EFT/ACH Electronic Premium Billing service (Exhibit III-15) is the logical extension (and evolution over time) of the previous billing and collection opportunity. As more policyholders opt for EFT/ACH-based premium payment, fewer bills are sent and there is less need for the collection/lockbox service. However, Moore IDS still adds value by sustaining the all-electronic solution: Moore IDS, not the insurer, maintains the facilities to print premium bills and collect premium checks at a lockbox when necessary, once again packaging the next-generation solution.

EXHIBIT III-16

**Insurance:
Secondary Priority—
Bar Code Insurer's File Copies**

- Applies to policies and/or EOBs with checks, though likely not to premium notices
- Assumes (or provides the final justification for?) Moore IDS printing of the original that is mailed to the policyholder
- Assumes insurer has or wants to have bar-code assisted filing system
- Assumes Moore IDS (perhaps with partner) could contract to help establish such a filing system if needed
- Assumes Moore IDS could sort printed output into order needed for filing system, using the bar code; likely would be into either an alphabetical sort or a numeric sort to speed file clerk in orderly filing of documents in paper files
- Provides springboard for insurer evolution into image filing (see Exhibit III-17)

Regarding Exhibit III-16, although not specifically a subject of the interviews, INPUT believes that the policy documents and EOBs with checks that are printed and mailed to policyholders will in most cases be backed up by file copies to support the insurer's response to future inquiries by the agent or the policyholder. (This is likely not true, however, for the highly regular and fully computerized monthly premium billings, where



the computer record itself will suffice for inquiries.) Assuming this is generally the case, it is a contributor to the often-reported woes of insurance companies in maintaining up-to-date, easy-to-access files on each insured.

This opportunity arises from a more generalized filing problem, of which copies of these documents are only a part (along with copies of policyholders' or agents' correspondence, doctors' reports, filings of accident appraisers, etc.). Already a number of insurers report early success in easing the general filing problem with a computerized system to help track files in transit between central files and underwriters' or claims-adjusters' desks. The system is based on bar coding each file so that it can be easily checked out of and into the central file, much as library books are checked out and in by libraries.

One interviewee reports taking this a step further: each document going into a file is tagged or automatically printed with a bar code to ease its matching with the right file. For company-printed documents (like the policy and EOB/check documents in question here) that are already laser printed, it is relatively easy to incorporate a bar code of the policy number, the insured's name, or the file number right on the document itself as it is laser printed. Given this, the documents can be sorted quickly or even automatically—from the bar code—into an order that speeds placement in files in the order that a file clerk will travel the aisles in the central file area.

Note that with this opportunity Moore IDS moves beyond the paper and electronic service business into the additional business of consulting (or partnering with consultants and/or vendors) to help insurers establish or augment such bar-coding systems.

This application also provides a springboard for rapid evolution into a more advanced service: image filing (see Exhibit III-17).

Electronic filing of images has already been pioneered in insurance and other industries, and this opportunity stems from that trend and the use of the bar-coding technology just cited as the key to physical filing today and the base for image indexing in the future. In most ways, this opportunity directly parallels the bar-coding opportunity, right down to the need for Moore IDS or a partner to provide consulting and/or set-up services. For insurers that first bar code files and documents, the evolution to image-filing should be relatively natural.



EXHIBIT III-17

**Insurance:
Secondary Priority—
Create Image Files, Not Paper Copies**

- Assumes (or provides the final justification for) Moore IDS printing of one or more business communications
- Moore IDS transmits one complete file of all images to the insurer daily, rather than copy-printing paper documents for filing
- Assumes Moore IDS (with strategic partner like Kodak or Filenet?) can help insurer set up image filing system
- A natural evolution from the "Bar Code Insurer's File Copies" opportunity above—insurer moves from electronic-assisted filing to all-electronic filing

EXHIBIT III-18

**Insurance:
Secondary Priority—
EDI-Based Health Claims**

- The EDI component is called Electronic Media Claims Submission (EMCS) in the insurance industry
- Hospitals, group clinics, and physicians can use their computers to file claims, using EDI data formats and transmission standards
- Future possibility: Expand so that administrators for (or even individuals covered under?) Group Health plans could file claims electronically through computer access at the employers' locations
- Provide payment either through EFT/ACH (with printed/mailed EOB?) or with printed/mailed check and EOB
- Note: January 1990 = \$1 billion in U.S. Medicare contracts for EDI prescription services



For Health insurers, Exhibit III-18 refers to the paperwork "blizzard" that starts with the daily volume of paper-based claims. An EDI (Electronic Data Interchange) expert at INPUT reports that, while the label EMCS has been applied to this, the industry to date has not coalesced around standards for electronic claims, and thus a major opportunity appears to exist for one or more service bureaus to establish dominance and help establish a new market. On the other hand, the fantasies reported by interviewees include indications that limited experience with this new option is already being developed, so the learning curve has begun, at least in one-on-one data interchanges if not in placement of a service bureau within the communications loop.

As noted, for Medicare the U.S. government will contract in January 1990 for over \$1 billion in four-year contracts to service prescriptions using EDI technology—a fine precedent.

C

Application/Service Opportunity Sizing and Ratings

The previous section detailed all the leading application opportunities, approaching the subject qualitatively. This section applies quantitative methodologies to place approximate numeric dollar-sizes on each opportunity and to rate them relatively.

EXHIBIT III-19

Insurance: INPUT Is Equating Basic Opportunity Size with Total Annual Expenditures on the Activity

Formula:

$$\text{\$ Opportunity} = \left(\begin{array}{c} \text{Average units} \\ \text{per \$ premium} \end{array} \right) \times \left(\begin{array}{c} \text{\$ premiums} \\ \text{for the industry} \end{array} \right) \times \left(\begin{array}{c} \text{\$ price} \\ \text{per unit} \end{array} \right)$$

Methodology

- Most interviewees provided volumes (units printed and mailed) of each application, for each company
- For each company and application, calculated units per \$ million of premium
- By application, averaged units per \$ million across companies (discarding extremes)
- From industry data, projected total units per application, based on averaged units and industry total \$ million of premiums
- From Moore IDS \$ price per unit and total units, calculated total expenditures—the total \$ opportunity



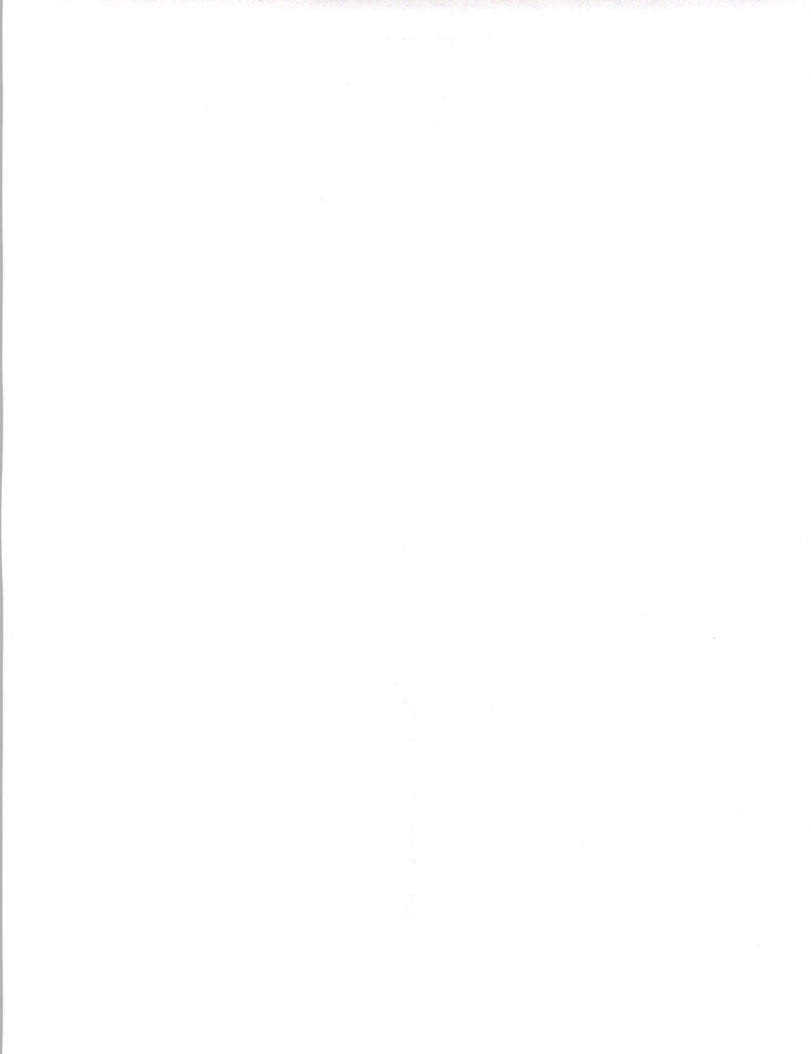
Given the inappropriateness of market forecasting for these opportunities, INPUT is adopting a working assumption that equates the sizing of each basic service opportunity with the size of today's estimated annual expenditures for such a basic application (see Exhibit III-19).

EXHIBIT III-20

**Insurance:
Basic Applications Sizing—
Numeric**

Application	\$ in Millions				
	Estimated Size, by Segment				Total
	P&C	L&H	Blues	TPAs	
Policies					
- Est. 1989 units in-house	380	75	N/A	N/A	455
- Assumption: \$1.00 per unit					
- Sizing, \$ value	\$380	\$75			\$455
Premium/Billing Notices					
- Est. 1989 units in-house	1,300	581	N/A	N/A	1,881
- Assumption: \$0.13 per unit					
- Sizing, \$ value	\$169	\$76			\$245
EOBs with Checks					
- Est. 1989 units in-house	117	825	210	87	1,239
- Assumption: \$0.15 per unit					
- Sizing, \$ value	\$18	\$124	\$32	\$13	\$187
Total Units	1,797	1,481	210	87	3,575
Total \$ Values	\$567	\$275	\$32	\$13	\$887

The formula for calculating dollar opportunities this way starts from an average number of units for each document type per dollar of insurance company premium, derived from interview results and public data about a company's premium revenue. (The worksheets for these derivations are shown in Appendix B.) Multiplying such units per dollar by total premium dollars for the industry as a whole (public data) yields estimated unit totals for each document type for the industry as a whole. The result

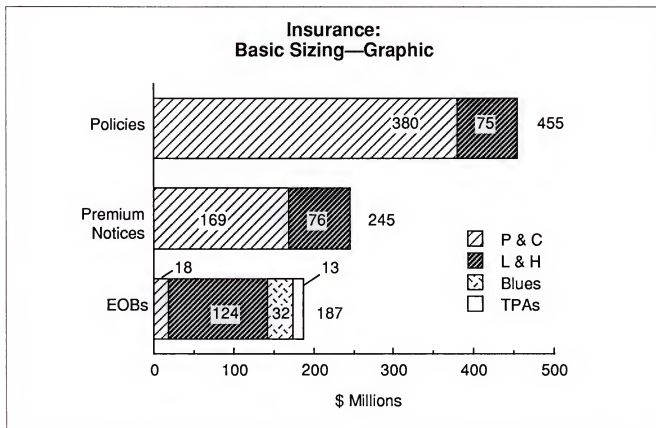


is then multiplied by a Moore IDS-provided figure for unit-pricing such a document (using a working assumption that such unit-pricing by Moore IDS is roughly equivalent to customers' in-house costs), yielding a figure for the total dollar opportunity size for each document type.

Using the opportunity-sizing methodology just described, the printing of policies for the P&C segments shows the largest application/segment size—today's largest in-house market. Though the unit-pricing assumption may be somewhat high, it represents a compromise between a lower price for the shorter length of policy documents found by INPUT, versus a higher price for generally longer policy documents experienced to date by Moore IDS Insurance Industry Marketing. A very substantial cut of about 50% in the policy printing unit-price assumption, however, would be required to bring that application/segment's sizing down to the level of that for P&C premium/billing notices, the next largest segment.

Exhibit III-21 provides a visual summary of the relative sizes of each basic application across all insurance segments.

EXHIBIT III-21



Next (Exhibit III-22), INPUT uses a standard rating methodology to balance the opportunity size just calculated with two other key criteria distilled from the interviews: insurers' willingness to outsource and their level of pain or problems, each with respect to a particular application.

EXHIBIT III-22

**Insurance:
Relative Attractiveness Ratings of
Basic Services Opportunities**

Application opportunity (\$ in millions)		Criteria ratings (range: 1 = negative to IDS, 5 = positive)			Overall attractiveness (range: 1 = lowest 125 = highest)
Type	Size	Relative Size	Willingness to Outsource	Level of Pain or Problem	= Relative Rating Value
Policies	\$455	3	1	2	6
Premiums	\$245	2	1	1	2
EOBs with checks	\$187	2	2	3	12
Total basic	\$887				20

As shown along the top of the exhibit's table, a five-point rating scale is applied to each criterion, where a "1" indicates a criterion that is negative to Moore IDS's interest in winning—or likely ability to win—such business, while a "5" shows a very positive criterion. By rating each of the criteria and then multiplying the ratings (the multiplication shown on the table as "Relative Size X Willingness to Outsource X Level of Pain or Problem"), the product is a Relative Rating value that represents the overall opportunity to Moore IDS in a fashion that combines the quantitative opportunity-volume sizing with the other two—essentially qualitative—criteria.

Relative size ratings are determined as follows:

Size Range (\$ Millions)	Rating
1-100	1
101-300	2
301-700	3
701-1,000	4
>1,000	5

The rationale is that an application opportunity is of only limited strategic interest if its size is under \$100 million, because a 10% development of the latent potential would be less than \$10 million per year in Moore IDS revenue. Likewise, any opportunity over \$1 billion is top rated (i.e., a "5") no matter how many billions of dollars it represents.

Moving to "willingness to outsource," interview results indicate that EOBs with checks are not fully locked up by in-house operations, so their rating of 2 is slightly better than the very negative ratings of 1 each given to policies and premiums, since insurers interviewed see little reason to send these applications to an outside vendor.

The "level of pain or problem" ratings here are subjective and relative INPUT judgements, based primarily on interviewees' comments. Interviewees say that premium printing is scarcely any problem at all to them now, yielding a rating of 1 when viewed from the standpoint of Moore IDS—Moore IDS will not have the advantage of selling into a situation fraught with recognized problems to be solved. Commercial P&C policies, in contrast, are indeed reported to be an operational problem now, yet they are only a relatively small portion of otherwise successful policy printing operations for personal P&C and L&H, so INPUT rates this at 2. For EOBs with checks, several interviewees note some significant inefficiencies today—especially in matching them, for those insurers who print EOBs and checks separately—and INPUT judges this level of pain or problem at a rating level of 3, relative to the other applications.

Given these ratings, INPUT rates EOBs with checks as the leading basic opportunity, followed by policies. Note, however, that this methodology does not account for the difficulty of developing and/or delivering a service opportunity, on the assumption that these are primarily investment questions: what corporate resource commitments are required to implement the objective? Unfortunately (as noted earlier in Exhibit III-6, the implementation costs—and risks—for achieving such a Commercial P&C policy printing service may prove prohibitive.



There is an important implication of this methodology—while the highest relative rating value possible here is 125 (5 X 5 X 5), three moderate ratings of 3 each yields a product of only 27. Clearly this is not 50% of the top rating of 125, and yet it is actually quite instructive: an opportunity that is totally positive to Moore IDS's interests in all ways—three ratings of 5 each—certainly should be far ahead of any moderately sized application for which customers now express a moderate willingness to outsource and experience only moderate pain or problems.

EXHIBIT III-23

**Insurance:
Enhanced Applications Sizing—
Numeric**

Application	\$ in Millions				
	Estimated Size, by Segment				Total
	P&C	L&H	Blues	TPAs	
ID Card with Premium Notice (Auto)					
- Relevant 1989 units*	160	N/A	N/A	N/A	160
- Assumption: \$0.35 per unit					
- Sizing, \$ value	\$56				\$56
Packaged Billings and Collections Service					
- Relevant 1989 units	1,300	581	N/A	N/A	1,881
- Assumption: \$0.23 per unit					
- Sizing, \$ value	\$299	\$134			\$433
EFT/ACH for Premiums					
- Relevant 1989 units	1,300	581	N/A	N/A	1,881
- Assumption: \$0.25 per unit					
- Sizing, \$ value	\$325	\$145			\$470
Bar Code File Copies					
- Relevant 1989 units	380/ 117	75/825	210	87	1,694
- Assumption: \$1.00/0.15 per unit					
- Sizing, \$ value	\$398	\$199	\$32	\$13	\$642

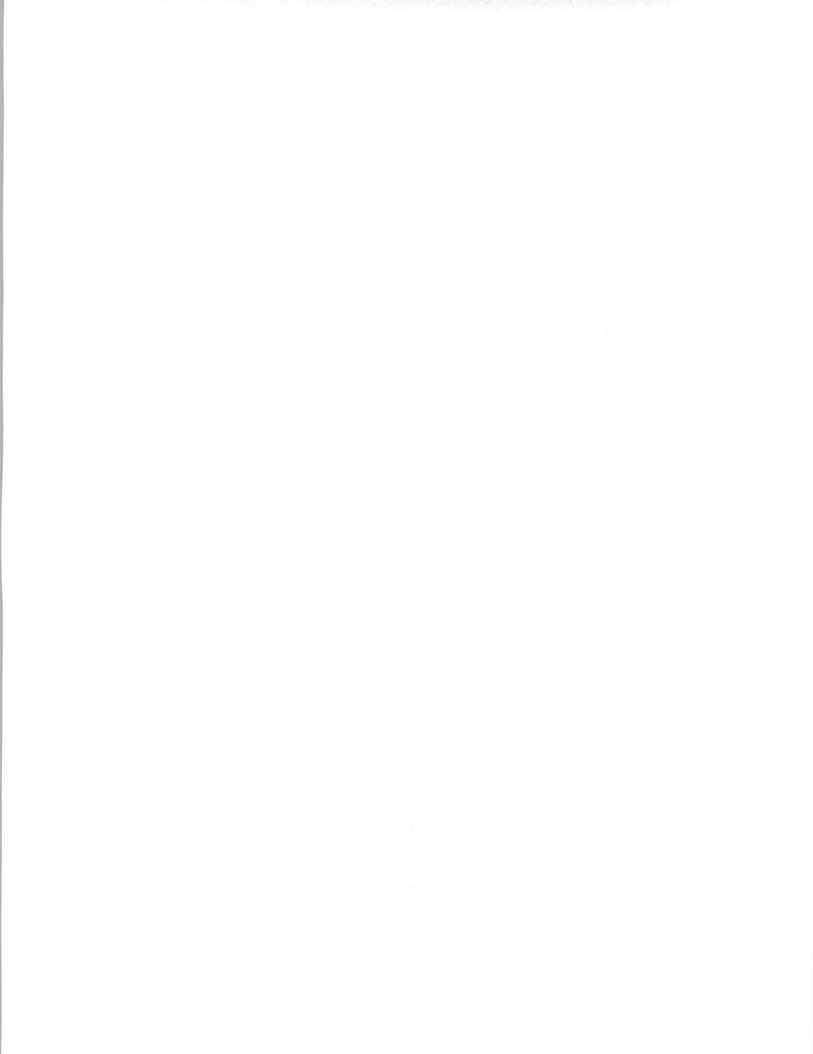


EXHIBIT III-23 (Cont.)

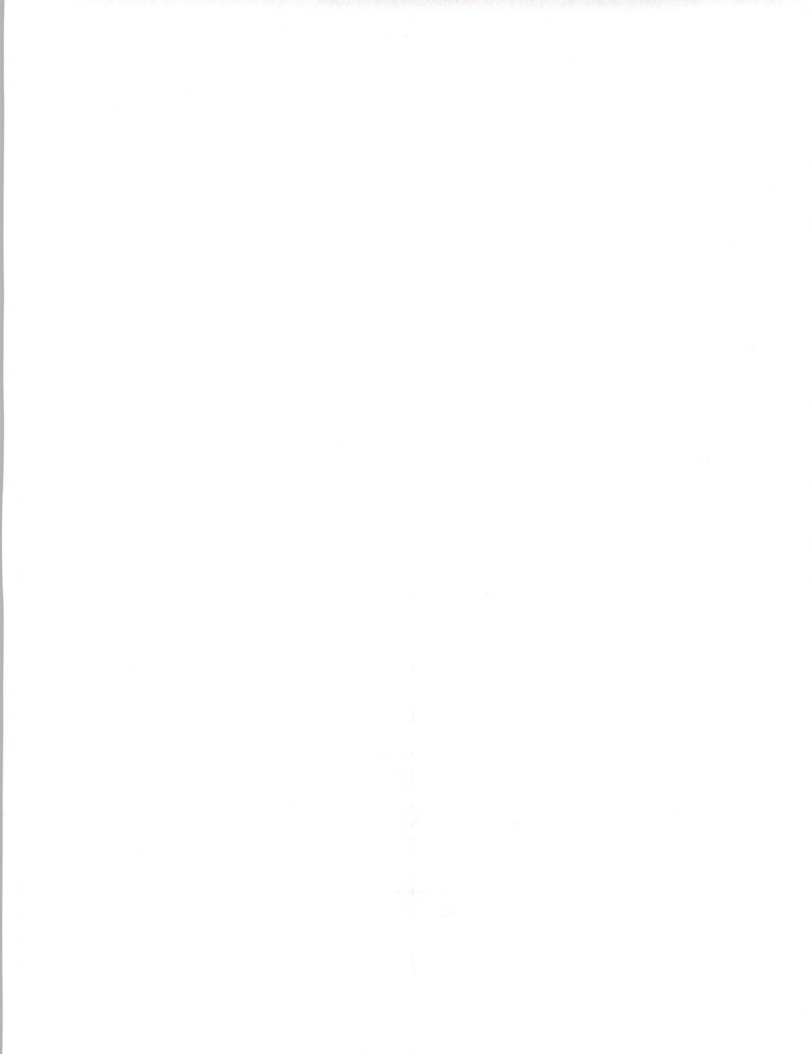
**Insurance:
Enhanced Applications Sizing—
Numeric**

Application	\$ in Millions				
	Estimated Size, by Segment				Total
	P&C	L&H	Blues	TPAs	
Create Electronic Image Copy					
- Relevant 1989 units	497	900	210	87	1,694
- Assumption: \$0.25 per unit					
- Sizing, \$ value	\$124	\$225	\$53	\$22	\$424
EDI-Based Health Claim Filings					
- Relevant 1989 units**	N/A	2,475	630	261	3,366
- Assumption: \$0.50 per unit					
- Sizing, \$ value		\$1,238	\$315	\$131	\$1,684
Total \$ Values	\$1,202	\$1,941	\$400	\$166	\$3,709

* Note: Number of U.S. motorists // ** Note: Assumes 3 claims per 1 EOB

Once again Exhibit III-23 represents a relative sizing of enhanced application opportunities, not a true market forecast. The difference, however, from the opportunity sizing provided for basic applications is that, while some of these opportunities are being handled fairly effectively in-house today (for example, auto ID cards), others scarcely have been tested yet—in the form proposed here—by insurers, much less widely implemented (for example, using EDI for health claims). While it is true that in many cases, Moore IDS will sell such an enhanced application by supplanting a current in-house activity, in most cases this will not be a one-to-one substitution: the enhanced application will add value by also providing a broader strategic benefit to the enterprise (e.g., better customer service).

(Note: Please see the exhibits and discussions following Exhibit III-12, for detailed qualitative introductions to each opportunity quantified here.)



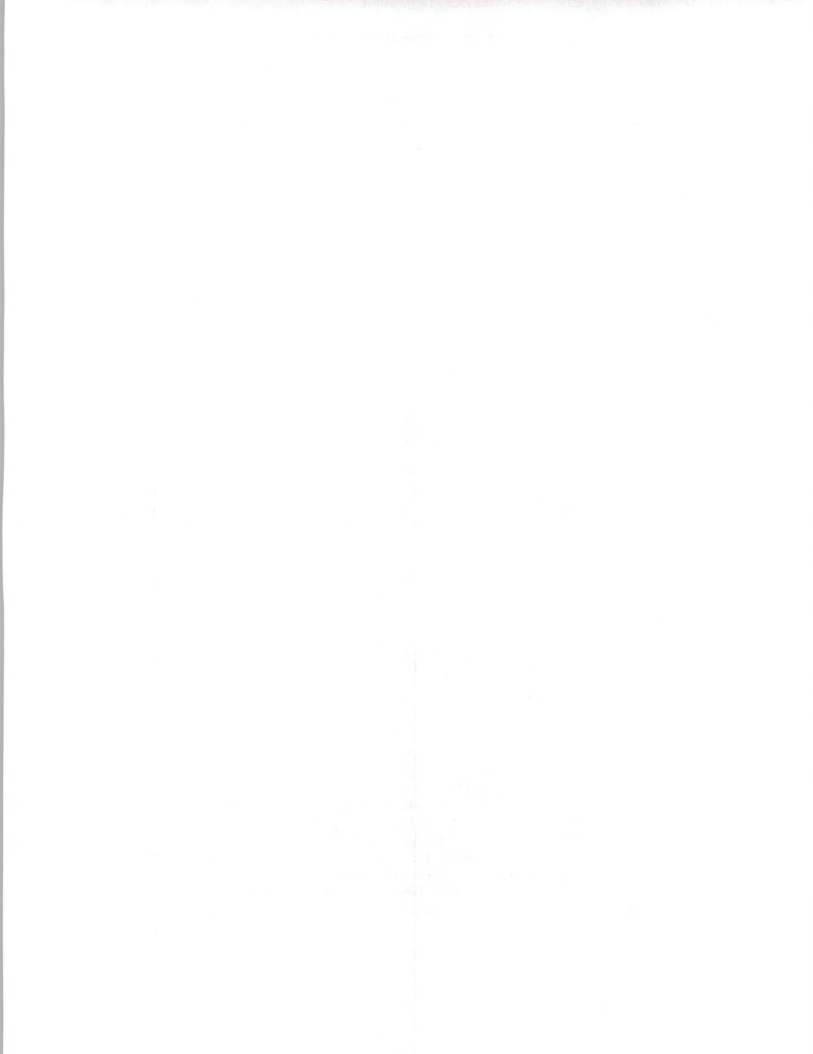
As to methodology for this opportunity sizing, the first application—automobile insurance identification cards printed and mailed with premium notices—requires several assumptions. It is first assumed that each of the U.S.'s 160 million motorists (source: Insurance Information Institute) is insured, and either now or in the near future (due to current trends in state laws) will need an ID card to be issued yearly as evidence of current insurance. Moore IDS (Insurance Industry Marketing) has supplied the \$0.35 unit price, for a single-page premium notice printed and collated for mailing with a computer-imprinted card (paper printing surface on plastic, non-embossed card).

For the next application, a packaged service to handle premium billings and collections, the relevant units are those cited in Exhibit III-20, "Basic Applications Sizing," for the related category of premium/billing notices. The unit price of \$0.23 derives from two sources for the two service components: \$0.13 for the billing service, as assumed for the sizing of the basic premium billing notice application, plus \$0.10 developed through an INPUT conversation with Moore IDS concerning discussions with National Processing Corporation about offering lockbox services.

Likewise, the unit number used for providing EFT/ACH electronic premium collection duplicates the units for yearly premium billing notices used to size the basic application, as just noted. In this case, the unit cost of \$0.25 is derived from extensive INPUT experience in EFT/ACH.

As noted in the discussion for Exhibit III-16, INPUT judges the bar-coding opportunity to be relevant only for policies and for EOBs with checks, so only those quantities are shown here. The relevant quantities for each application are shown separately under P&C and L&H because their unit pricing is significantly different, as also shown in this exhibit: Moore IDS and INPUT believe this pricing—including the bar coding—will not differ from the \$1.00/\$0.15 pricing assumed earlier to print such documents as basic applications without bar codes.

For the electronic image copy application, however, the unit quantities for these same applications are totaled into a single quantity, as the unit pricing for electronic imaging is assumed to be relatively insensitive to document length at the less-than-three-page lengths assumed here. Note that, given the relative youth of the image-filing industry, the unit price of \$0.25 (developed by INPUT in consultation with a leading industry consultant and system integrator, Image Business Systems Inc.) is relatively rough. It could be high by perhaps \$0.10 or \$0.15, or low by as much as \$0.50 or more, as no precedent exists for such service bureau imaging work; note also that most imaging work to date starts with a paper document, not an electronic data set for imaging.



At first, no good figures were found for the industrywide health claims quantities needed to size the EDI-based application. Rather, INPUT assumed an average of three claims are covered on the typical EOB. Late in the research, a rough industry wide estimate of health claims was found that substantiated this estimate. The \$0.50 unit price derives from extensive INPUT expertise in EDI.

Using this methodology, the EDI opportunity within the L&H segment (as distinguished here from the closely identified Blues and TPAs segments, which are also sizable) shows the largest application/segment size. The P&C segment shows lesser, but still strong, application quantities for the two premium billing applications and the bar-coding application.

One final note: Even at the sizing—rather than market-forecast—levels, these enhanced opportunities present another quantification challenge. The two premiums applications and the two copies opportunities are classic migration opportunities, where Moore IDS ideally may be able to start a customer on the less-electronic one within the pair and then migrate the customer to the other, more advanced application. Thus, their sizing in this exhibit should not be considered strictly additive, despite the total \$ values shown; think of this line as showing the total yearly opportunity primarily to support calculations of percent-of-total numbers for simplified cross-comparisons, should those be useful to Moore IDS's subsequent analysis of this data.

Exhibit III-24 provides a graphic presentation of the relative sizes of each enhanced application, across all insurance segments.

Exhibit III-25 duplicates the methodology of Exhibit III-22.

All "willingness to outsource" and "level of pain or problem" ratings here are subjective and relative, INPUT judgements, based on both direct statements in interviews and general insurance industry experience and knowledge.

As to willingness to outsource, for the three applications judged at rating levels of 1, INPUT believes that those interviewed would view these as very close to functions currently performed in-house, and thus would express a strong preference for transitioning to an in-house version of each of those enhanced applications, rather than outsourcing them. In contrast, the ratings of 3, 4, and 5 express INPUT's belief that interviewees would express corresponding levels of reservation about evolving their in-house operations in those directions if cost effective outside services were available, thus favoring Moore IDS's position as an outside vendor.

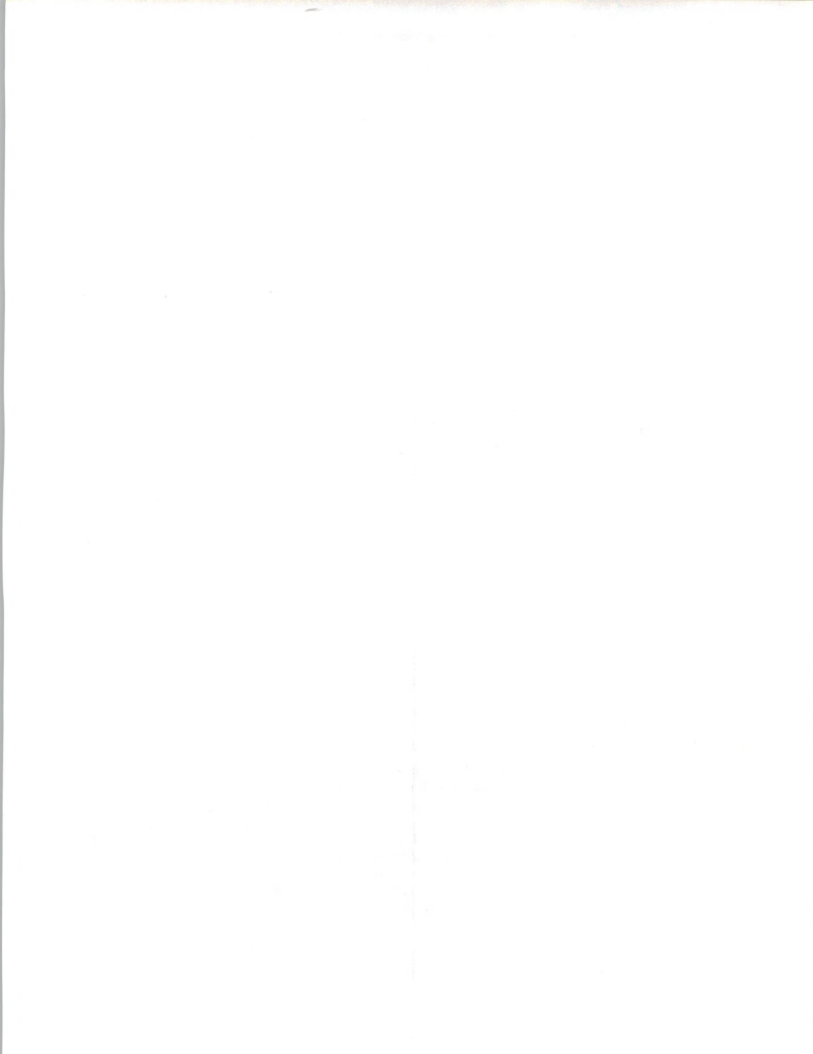
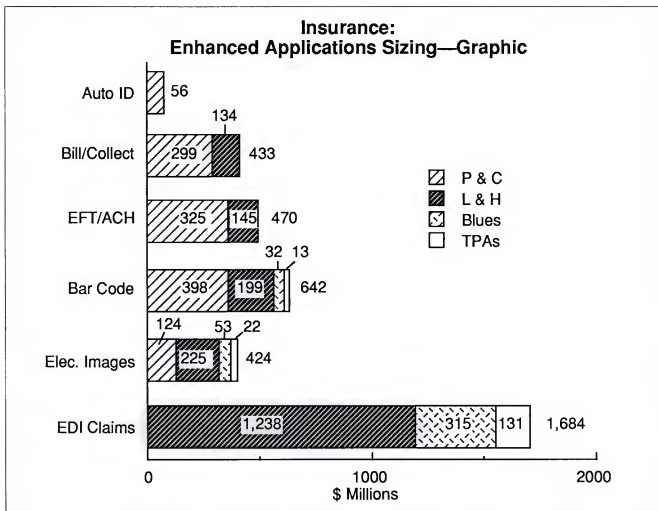


EXHIBIT III-24



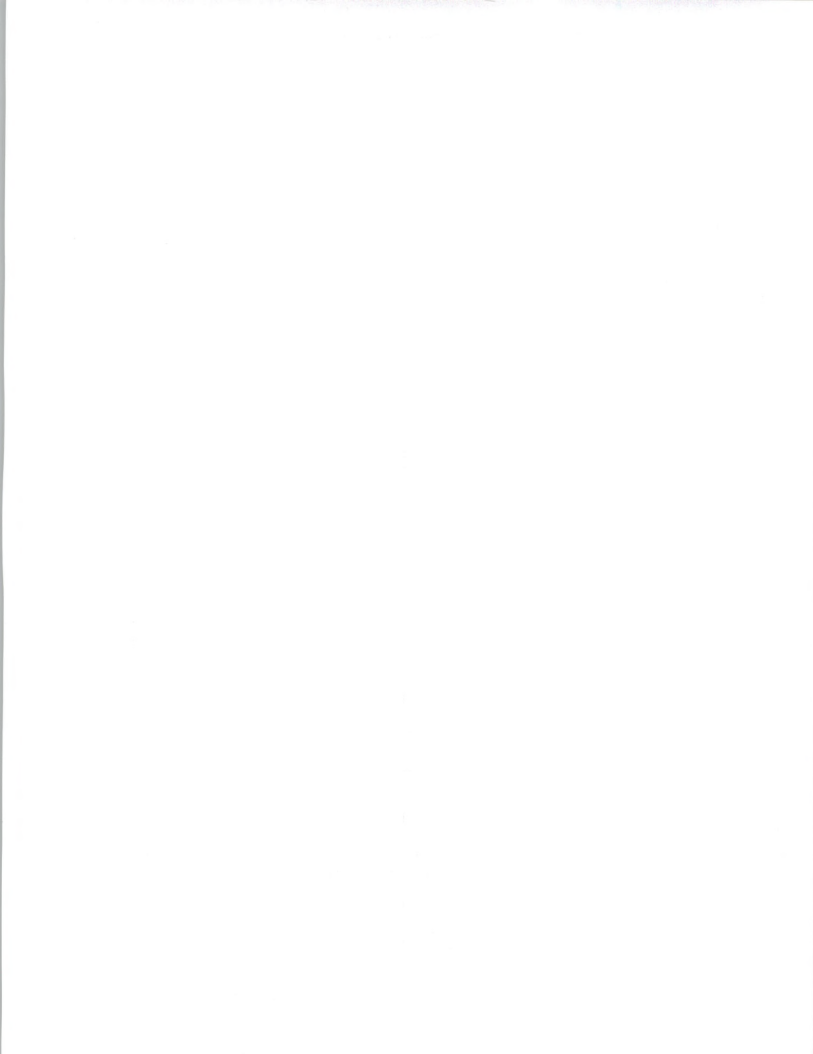
The rating of 1 for level of pain or problem for the packaged billing and collections service indicates that almost no one interviewed sees this as a significant problem today. Auto ID problems show up—although still at a low level of 2—for insurers interviewed that have not adopted the common practice of printing them right on other documents (perhaps using a somewhat heavier paper stock) and then perforating them for detachment by the policyholder. Similarly, EFT/ACH-related “pain”—in the form of costs and delays in payment credit that could be pointed out to prospective Moore IDS customers, versus lower costs and higher speeds—occurs at the 2 level mostly for a few trailing edge companies interviewed who still print a paper checking draft monthly to implement automatic premium payments, rather than handling such payments in all-electronic fashion. The ratings of 3 for currently felt problems related to bar coding and electronic image-copy filing reflect general industry wide concerns (heard directly in a number of interviews, as well) about the painful costs and the service-to-policyholder problems associated with ever-growing paper-based file systems.

EXHIBIT III-25

**Insurance:
Relative Attractiveness Ratings of
Enhanced Services Opportunities**

Application opportunity (\$ in millions)		Criteria ratings (range: 1 = negative to IDS, 5 = positive)			Overall attractiveness (range: 1 = lowest 125 = highest)
Type	Size	Relative Size	Willingness to Outsource	Level of Pain or Problem	Relative Rating Value
Auto ID	56	1	1	2	2
Bill/Collect	433	3	1	1	3
EFT/ACH	470	3	3	2	18
Bar Code	642	3	1	3	9
Elect. Images	424	3	4	3	36
EDI Claims	1,694	5	5	4	100
Total Enhanced	3,719				168

This rating might be higher if many did not consider such costs and problems an inescapable fact of life in the paper-intensive insurance industry; creative salesmanship by Moore IDS could raise this to the 4 level in many live customer situations where this "pain" and the bar-coding/image-based alternatives were fully reviewed. Finally, the rating of 4 for problems associated with claims filings reflects widespread and relatively constant internal corporate pressure industrywide to reduce claims-processing costs, which top executives rightly regard as a controllable expense that directly impacts bottom-line profits. Everyone complains about this, yet few have found any good solution to reducing claims-processing costs further, much less improving the speed of service to policyholders.



Given these ratings that balance the quantitative and qualitative criteria, using EDI for health claims is the clear winner, far outstripping the others. Electronic image filing is a credible second-priority application, with EFT/ACH-based premium billings rated as worth pursuing as well. The other enhanced applications look decidedly less desirable.

The wide variation in ratings shown here underscores an earlier note about an important implication of this methodology, justifying substantial restatement of that note here: While the highest relative rating value possible here is 125 (5 X 5 X 5), three moderate ratings of 3 each yields a product of only 27. Clearly this is not 50% of the top rating of 125, and yet it is actually quite instructive: an opportunity that is totally positive to Moore IDS's interests in all ways—three ratings of 5 each—certainly should be way “ahead” of any moderately sized application for which customers now express a moderate willingness to outsource and experience only moderate pain or problems. The value of 100 shown here for the EDI/claims enhanced application—compared with rating products of 2 and 3 at the low end—underscores the wide range of differentiation possible with this rating methodology.

D

Recommendations

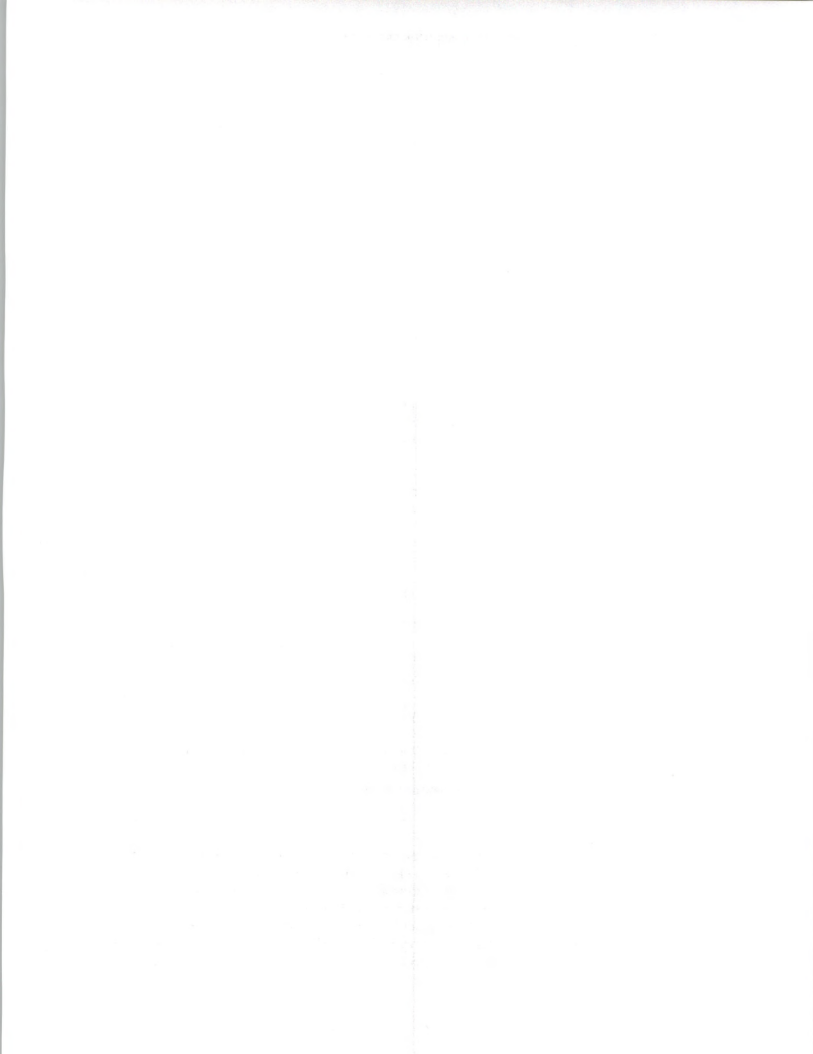
INPUT notes here several recommendations—and some closely related cautions—for Moore IDS attention and action.

EXHIBIT III-26

Insurance: Recommendation— Basic Services Opportunities

- Focus quickly and primarily on EOBs with checks
- Sell to some mid-sized insurers
- Likely also sell to many small insurers
- Also research commercial P&C policy printing for possible investment and/or partnership

For those insurers that have not yet implemented one-page, laser printer-based EOBs and checks, Moore IDS should seize a relatively substantial outsourcing opportunity. Fast action is required to win such business before the opportunity window to compete with increasingly cost-effective in-house laser printers closes further than it has already. Smaller insurers not surveyed here by INPUT may also be ideal—although lower volume—prospects for such a service.



Commercial P&C policy printing may or may not look like an attractive basic service opportunity upon further research. See Exhibit III-6 for cautions.

Reference Exhibit III-27, a customer objection to any outsourcing of basic applications will be the logistical challenge of daily computer-tape writing, transportation, and mounting/reading. Several interviewees volunteered this reservation about current use of lockbox collection services, which provide daily accounting tapes of receipts and deposits.

EXHIBIT III-27

**Insurance:
Recommendation—
One Key to Winning Basic Applications**

- **Opportunity:** Contract for insurer's IS department daily to assemble and transmit all data for printing
- **Note:** Benefit in electronic transmission reflects several interviewees' complaints about handling daily tape transfers (especially for lockbox accounting)

Moore IDS should pre-empt this objection by planning for and aggressively implementing electronic transmission-based services that obviate the need for computer-tape transfers.

The cautionary Exhibit III-38 collects in one exhibit a number of notes about obstacles discussed earlier, mainly in Section III B. See those earlier discussions for more background.

The last point does bear further discussion now, as it likely represents a major lever for any successful sale by Moore IDS into the basic application category. INPUT recommends that Moore IDS undertake high-level sales calls on insurance company financial executives to implement this angle, as follows. Most interviewees with laser printers expect to add more of the expensive laser printers in the next one to three years. Moore IDS sales reps should ask each financial executive what capital funds are now budgeted or anticipated for such purchases, and then propose that—initially—just one major laser-based application, such as EOBs with checks, be outsourced soon to Moore IDS. Argue to the financial executive that the normal, anticipated growth of other laser-based applications then could be absorbed with currently installed laser printers, avoiding costly new investments. The savings can be applied to cost-justify the outsourcing to Moore IDS. This approach to the financial

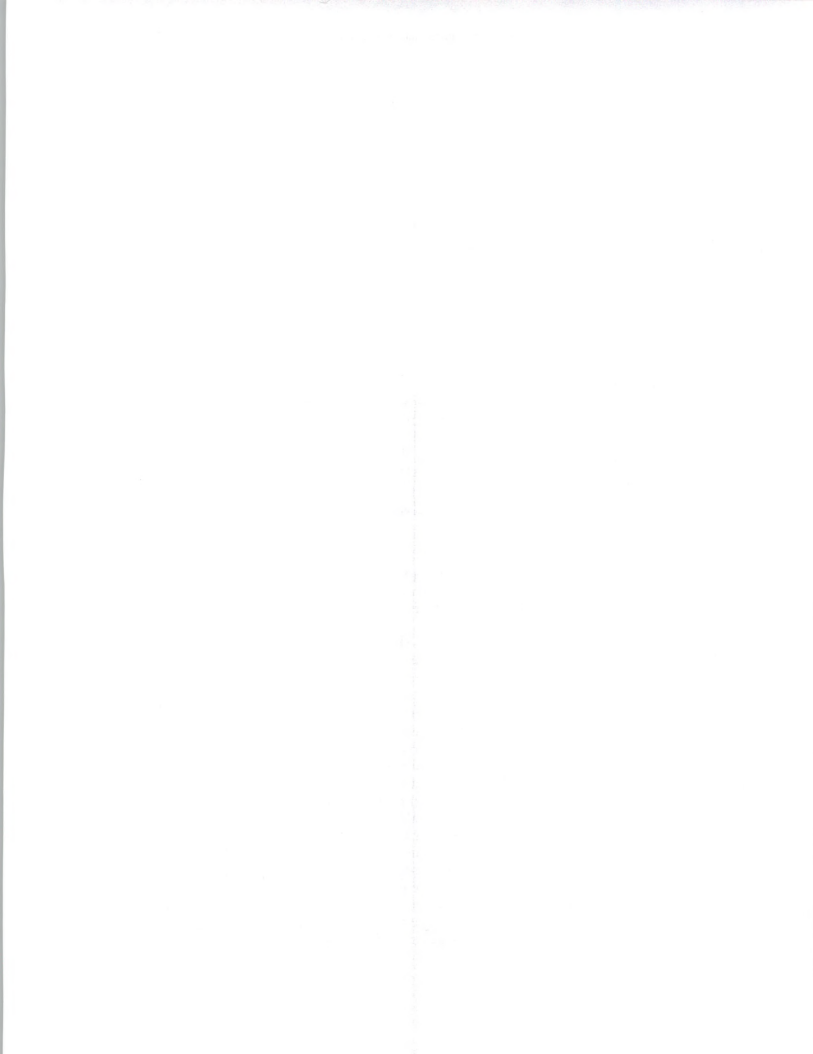


EXHIBIT III-28

**Insurance:
Cautions—
Basic Services Obstacles**

- Outsourcing mission critical documents is seen as dangerous
- For policy printing, must either:
 - Adapt to Documerge™ format, or
 - Conform to insurer-unique data formats, and/or
 - Match current printing formats
- EOBs with checks:
 - Are not always centralized
 - Vary organizationally, administratively, and technically
 - Require special check-printing paper stock
 - However, are very sensitive to the insurer's financial/accounting control...
 - Which might let Moore IDS sell its complete audit capabilities and increased accuracy
- All applications are now handled in-house very well, mostly on new laser printers
 - Exception—commercial P&C policies
 - Recommended sales angle: Outsource one application first, and avoid buying another laser printer for handling the growth of others

executive provides a critical lever against the turf protection and reputation/empire-building resistance mentioned earlier as likely to be encountered among operational managers who have recently succeeded in implementing laser printing and likely will want to expand from that base of success.

As Exhibit III-29 indicates, both the opportunity sizing and the consolidated ratings provided earlier point to the EDI-based health claims service as the most attractive enhanced service opportunity. Note, though, that building the expertise and infrastructure for such a service will require a substantial corporate commitment by Moore IDS.

Winning the image-filing opportunity will require creation of an image-servicing and/or consulting service that is not known to be present in insurance or any other industry. Image-filing pioneering to date has been mainly in-house, based on hardware purchases from leading vendors such as Filenet and Kodak. The only relevant service bureau niche



EXHIBIT III-29

**Insurance:
Recommendation—
Enhanced Services Opportunities**

- Quickly build, acquire, or ally to achieve EDI-service expertise and infrastructure required to offer the health claims service
- Prepare for the image-filing opportunity
 - Perhaps start by developing and selling the bar coding/filing service
- Determine technical and other requirements to provide the EFT/ACH premium billing service
 - Perhaps start with the related package of billing and lockbox-based collection services

already emerging is the outsourcing to a service bureau for rapid, low-cost imaging of archives of paper files, to achieve electronic-file integration with a firm's new in-house image filing system. This, of course, is a one-time opportunity for each customer, and thus is judged by INPUT to be of little interest to Moore IDS. Note that bar coding of printed documents to improve paper filing—while not rated as attractive in its own right as an enhanced service opportunity for Moore IDS—may prove a useful transition or get-acquainted service to open up a customer to a new image-filing service from Moore IDS.

Similarly, an EFT/ACH-based service for premium billing should be examined technically in considerable detail before Moore IDS invests in providing such an enhanced service. In contrast, the packaged billing and lockbox service that might lead a customer into buying such a service later could be offered relatively quickly by Moore IDS, once one or more lockbox partners were found. This lead-in to EFT/ACH might justify providing the packaged service that otherwise rates relatively low as an enhanced opportunity.

While each of these enhanced opportunities requires substantial computer-related investment, little non-computer physical plant expansion will be required for Moore IDS to seize the enhanced opportunities.

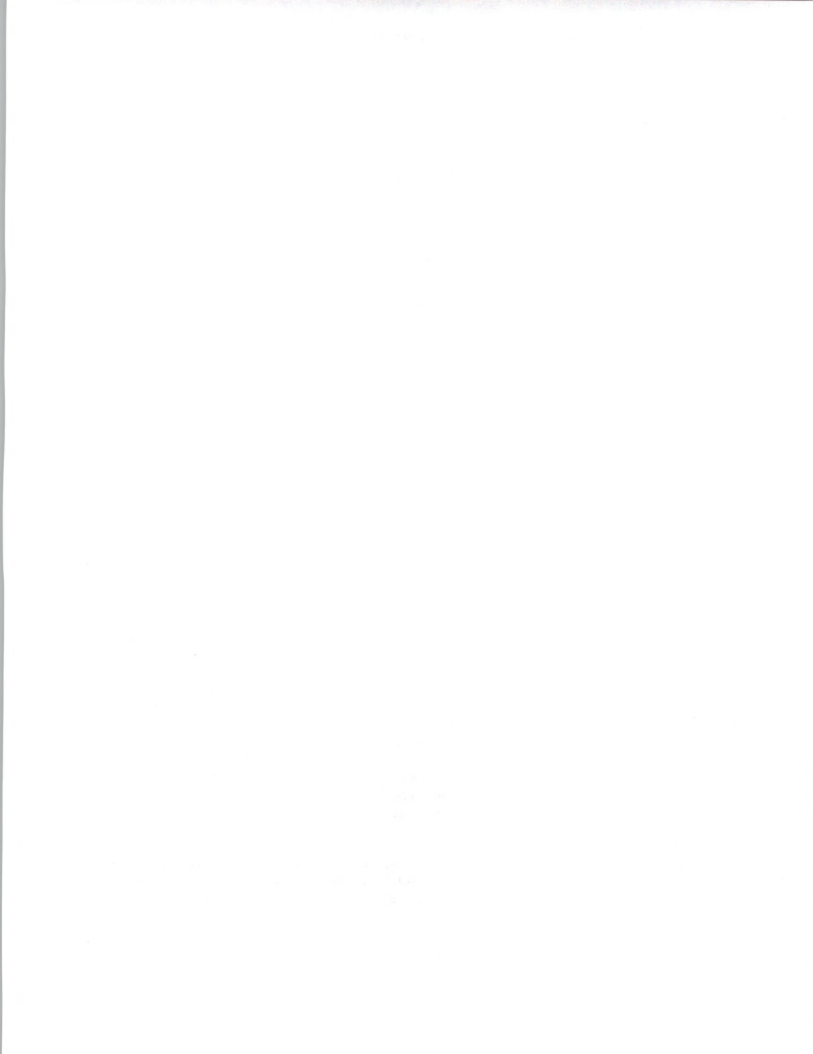


Exhibit III-30 starts with some good news: any Moore IDS success in winning basic service business in printing and mailing policies and EOBs with checks can feed prospects into the new, enhanced services of bar coding for filing and electronic imaging. In fact, provision by Moore IDS of one or both of these enhanced services may indeed be the deciding factor in convincing a customer to outsource the original document printing and mailing function, plus contracting for the new, related service.

EXHIBIT III-30

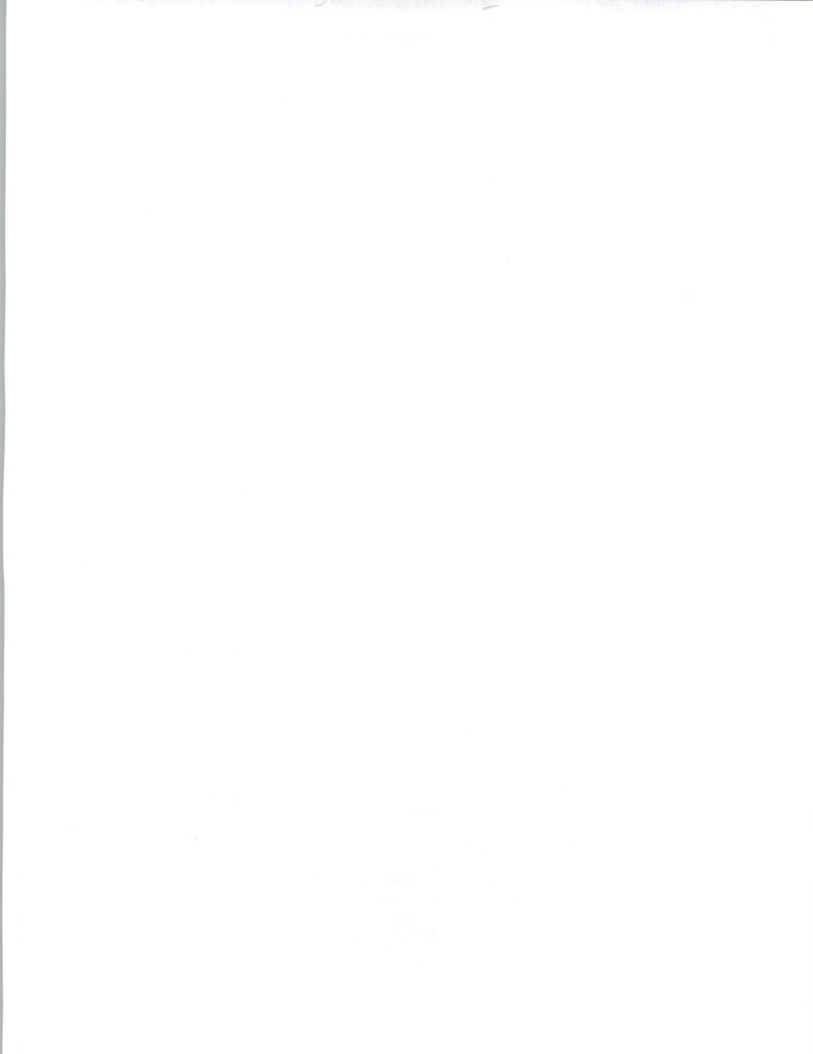
**Insurance:
Caution—
Basic and Enhanced Services
Are Largely Discontinuous**

- One case only: Basic policy/EOB printing feeds the enhanced applications of bar coding and electronic imaging
- Otherwise: Only limited connections between basic and enhanced service opportunities
- Given this discontinuity, Moore IDS must make hard decisions in order to focus

The bad news is that such connections are more tenuous for the other enhanced applications. If, for example, auto ID cards are to be printed and mailed with annual premium notices (or, perhaps, the annual one-page summary statements of coverage in force, which may indeed be a viable alternative), this would have to leverage on the premium-billing application that INPUT judges to be a relatively poor basic opportunity.

Likewise, enhanced services for EFT/ACH premium billing and a billing/collection service package would be better positioned if basic services for premium billing were better opportunities for Moore IDS, creating a natural migration path over time.

Similar bad news is found with the EDI/health claims enhanced service opportunity: no corresponding basic opportunity deals directly with the claims function, although it could be argued that the EOB function is the back end of the claims process and thus service to an insurer on EOBs would provide a natural entree for offering the EDI/claims service; perhaps this theory should be further researched.



Given a relative state of discontinuity between basic and enhanced services, however, Moore IDS faces rather difficult corporate choices (assuming limited corporate resources) between investing now in developing and selling basic services that probably will be discarded over time, or advancing into enhanced services that are somewhat speculative and in any event will not begin to pay off significantly before three to five years from now. Any success in improving the migration path and decreasing the discontinuities identified above, of course, will ease the difficulty of such investment decisions.

EXHIBIT III-31

**Insurance:
Recommendation—
Most Opportunities
Will Require an Educational Sell**

- Basic services opportunities: Educate about outsourcing
- Enhanced services opportunities: Educate about the future (near and far)

Exhibit III-31 points out that insurers who operate primarily in-house today—and have recently succeeded with laser printers—will have to be educated about the virtues of outsourcing: levels of service, costs (if lower than or comparable to in-house), and substituting on-going service costs for in-house capital investments. Also important is avoiding the hassles of keeping up with rapidly changing technology, vendor options, outdated equipment and processes, etc.

Similarly, Moore IDS will succeed in selling enhanced services only if insurers are educated to share a vision of the near and/or far future technological opportunity that provides realistic approaches to their fantasies, including an increasingly paperless office operation. They must both see the feasibility of the solution and envision “the IDS division of Moore Business Forms” (perhaps renamed) as a credible vendor of such electronic services.

The data in Exhibit III-32 is curious, given interviewees’ strong unwillingness to seriously consider outsourcing: nearly two-thirds (16 of 25) of those interviewed express at least a tolerant openness to a no-cost study of the types of business communication operations that had been discussed in detail during the interview’s quarter-hour before this question was asked.

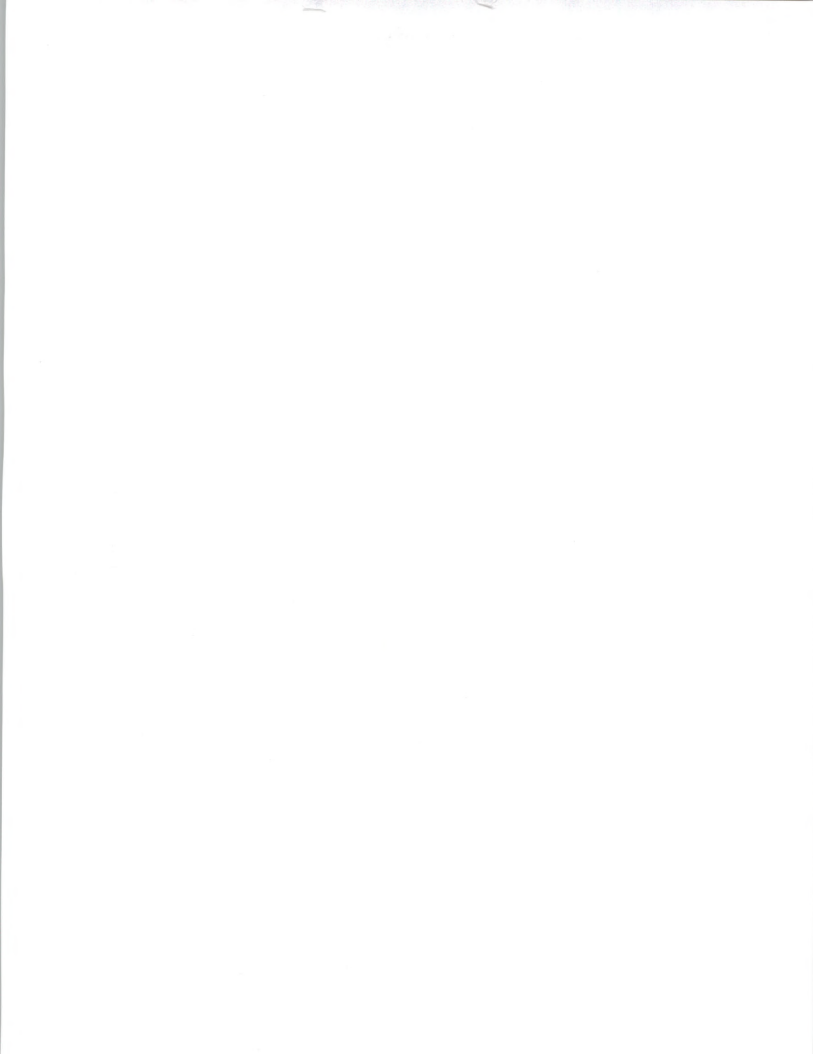


EXHIBIT III-32

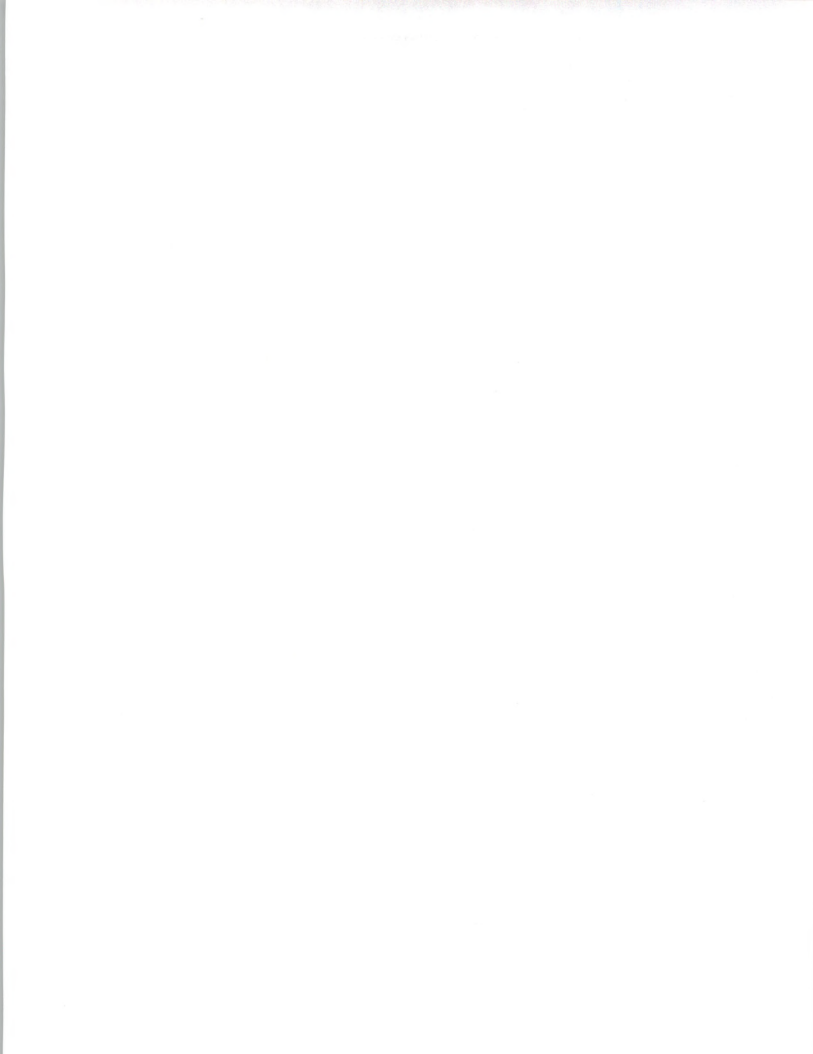
**Insurance:
Recommendation—
Offer an Operations Study to Prospect**

- Moore IDS opportunity: Two-thirds say a no-cost operations study OK
- Use as a Trojan Horse to educate prospect and access higher management levels

Note: The planned question format proved awkward—given INPUT's self-positioning as an independent researcher—when it was asked in terms of a study sponsored by a business-communications vendor, so that type of reference was dropped. The interviewer believes, however, from verbal cues given and received, that most interviewees understood that “no cost” equalled “sponsored by a vendor,” although they might have had Xerox, IBM, or Pitney-Bowes, in mind as vendors of possible improvements to in-house printing and mailing operations.

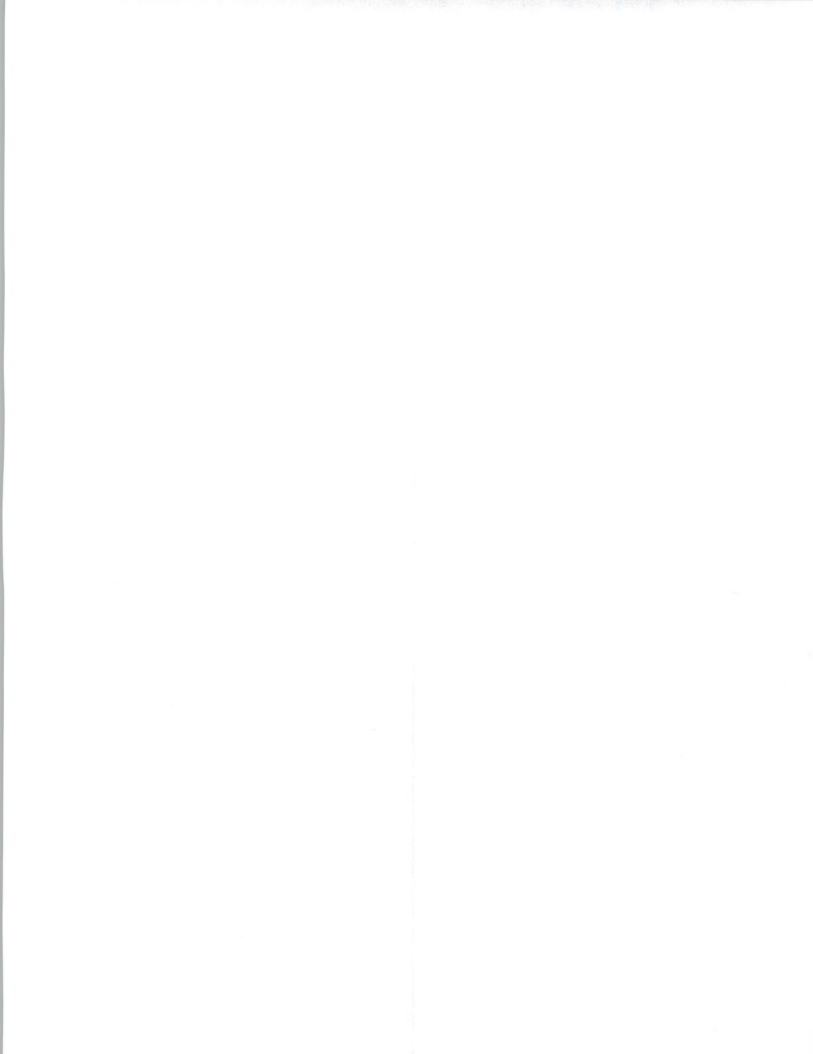
Interviewees would expect the study to cover primarily issues of efficiencies, new options, and costs. Those who would decline a study generally indicate they are highly satisfied with current operations, given their investments and successes to date.

Given this finding—and the need just outlined for an educational-sell approach, which will benefit from more information—INPUT recommends that Moore IDS exploit a Trojan Horse strategy that uses such studies to win study-based access (“for interviews about key business-communication needs”) to key principals. This will also open up the opportunity to present both the results and the Moore IDS business case at the highest management levels: to executives who can take the broadest view of proposed business efficiencies and improvements in business communication effectiveness.



IV

Implementing Enhanced Services: Sales/Delivery Mechanisms Required



Implementing Enhanced Services: Sales/Delivery Mechanisms Required

A wide range of new sales and delivery mechanisms will be needed for Moore IDS to offer enhanced services.

EXHIBIT IV-1

Insurance: New Sales and Delivery Mechanisms Required

Opportunity	Sales Expertise	Printing Equipment	Information Technology	Alliances/ Acquisitions
P&C Policy	(None)	(None)	Expert systems software*	Policy Mgmt. Systems Syntelligence
Auto ID	(None)	(None)	(None)	Equifax
Bill/Collect	Lockbox Info	(None)	Lockbox accounting and reporting systems	Lockbox vendor(s)
EFT/ACH	EFT/ACH info Service bureau	(None)	EFT/ACH network connections EFT/ACH processing Service bureau accounting	EFT/ACH gov't. authorities EFT/ACH service bureau(s)?



EXHIBIT IV-1 (Cont.)

**Insurance:
New Sales and Delivery Mechanisms Required**

Opportunity	Sales Expertise	Printing Equipment	Information Technology	Alliances/ Acquisitions
Bar Code	Bar code filing systems	(None)	Imaging data-to-bar code	Bar code filing vendor(s)
Elec. Images	Electronic filing systems	(None)	Imaging data-to-electronic file	Kodak Filenet Wang Xerox IBM/Image Systems Corp.
EDI Claims	EDI information Health claims information Service bureau	(None)	EDI translation/ store-and-forward Service bureau accounting	National Electronic Information Corp. IBM/ACORD/ IVANS AT&T Geisco Tymnet PCS Inc. ARC/AMS (Agency Management Systems) Wallabee Corp. Blue Cross of S. Carolina Electronic Data Systems Computer Sciences Corp. National Data Corp. Equifax Policy Mgmt. Sys. Aetna

* Questionable "do ability" with current technology



See the following sections for column-by-column discussions on this exhibit.

A

Sales Expertise

To the extent that new technologies such as EFT/ACH, bar coding, electronic imaging, and EDI are required to sell one or more enhanced services, sales reps will require the relevant technical training. They will require training in lockbox services for the billing/collection opportunity. Selling the EFT/ACH- and EDI-based services will require them to understand the dynamics of service bureau sales and customer service. Finally, selling the EDI health claims service will demand that sales reps be relatively knowledgeable about the claims function within the health insurance segment and EDI technology.

B

Printing and Mailing Equipment Required

INPUT identifies no needs for new printing or mailing equipment types to implement any of the enhanced service opportunities.

C

Information Services Technologies Required

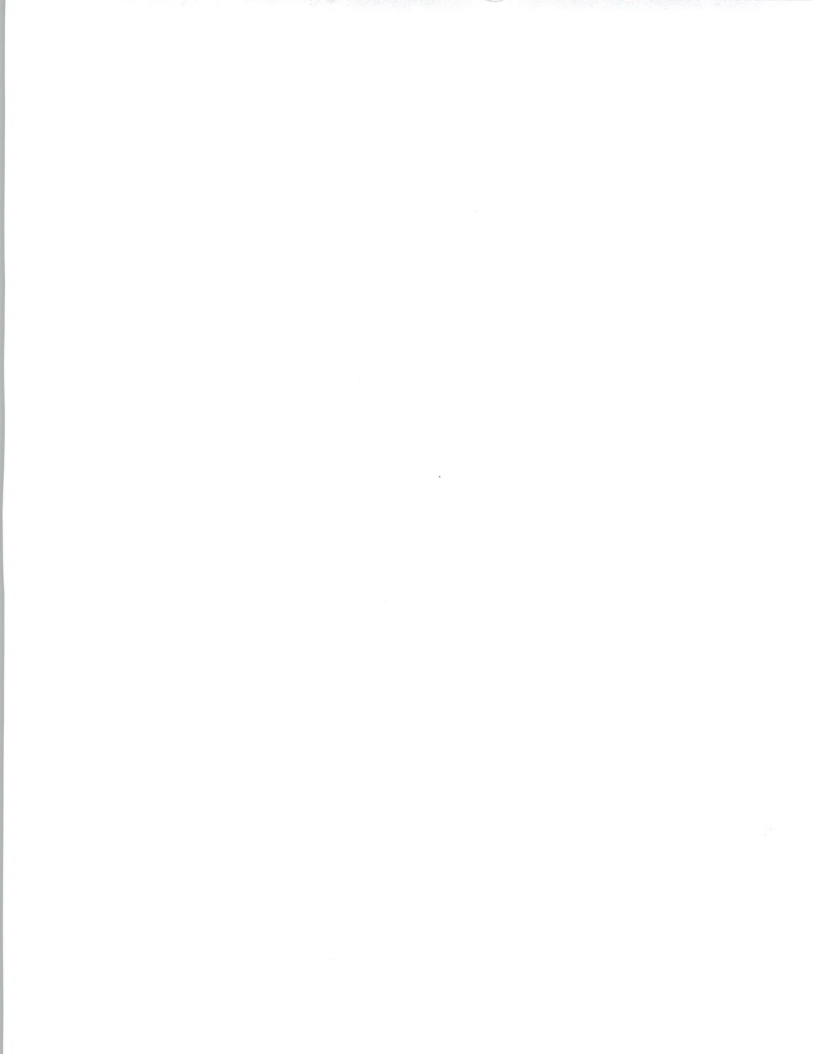
In most cases the information services technologies required are specific to the technical base of each enhanced service opportunity, and these are detailed in the sections covering those opportunities. Additionally, this exhibit identifies some accounting system requirements specific to the lockbox or service bureau environments involved with several opportunities.

The only generalized new information service technology that Moore IDS needs to implement for almost any opportunity identified—including the basic services of taking over some or all in-house printing and mailing operations—is expanded electronic data transfer technology that would permit insurers to transmit data and instructions through daily electronic communications. This would avoid the cumbersome—and perhaps unsalable—process of daily transfers of magnetic tapes.

D

Potential Alliances/Acquisitions

A number of firms would be potential allies and/or acquisition candidates for Moore IDS, generally on an opportunity-by-opportunity basis. Most of the firms listed are well-known insurance industry or information-services industry leaders, although a few are newer pioneers identified by INPUT in the course of this research. Those marked “(?)” may or may not prove relevant on deeper investigation.







Other Observations





Other Observations

A

Data Processing/ Information Services Issues

As Moore IDS plans for close electronic interaction with insurers, it should be noted that the insurance industry in many ways helped to pioneer data processing systems over the last few decades. As a result, some insurers' systems have evolved unevenly over this long period; thus they may have a patchwork of older systems. Such odd groupings of systems may be subject to major overhaul soon, if such an overhaul is not in process now or has not already been completed.

Given this uncertainty, Moore IDS should consider surveying information systems managers in the insurance industry to determine specifics and trends, especially as to: (1) whether use of laser printers is just patching new printers onto old systems that actually need greater overhauls, and (2) whether the company's plans or needs for systems overhaul will or can influence Moore IDS opportunities—negatively or positively—to sell information service-based front-end and back-end services along with basic printing and mailing services.

B

Environmental Threats and Opportunities

A number of environmental threats and opportunities are relevant to the applications outlined above for the insurance industry.

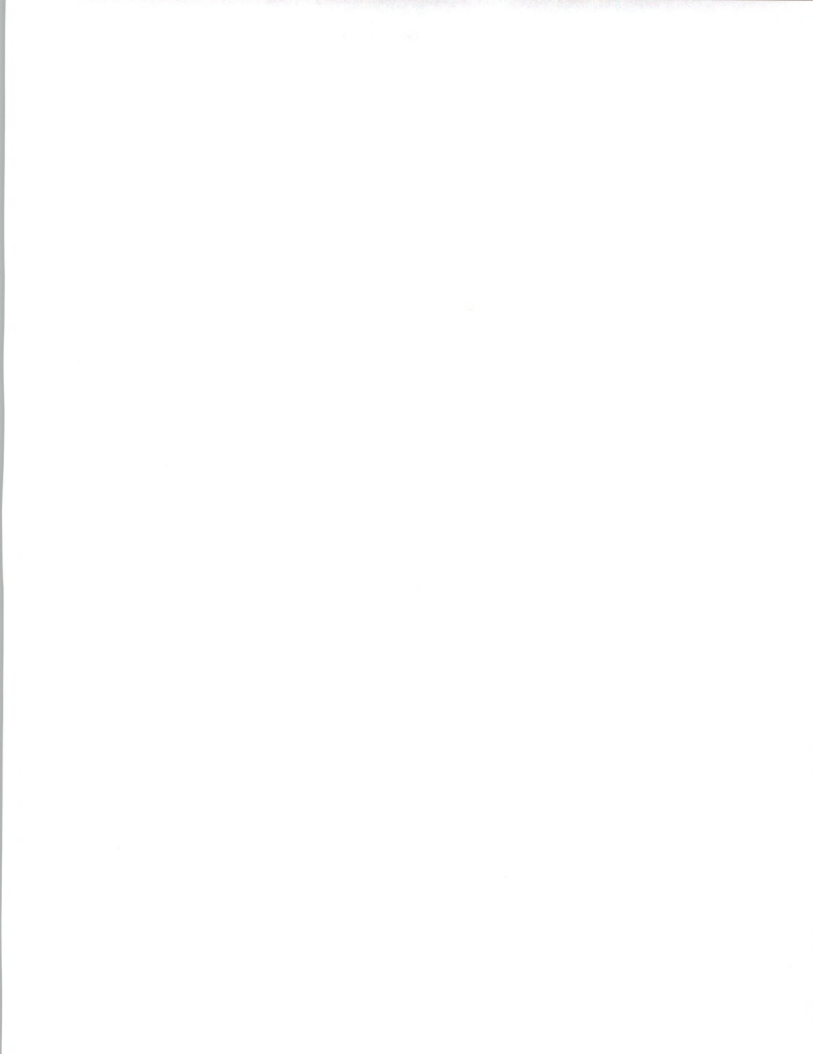


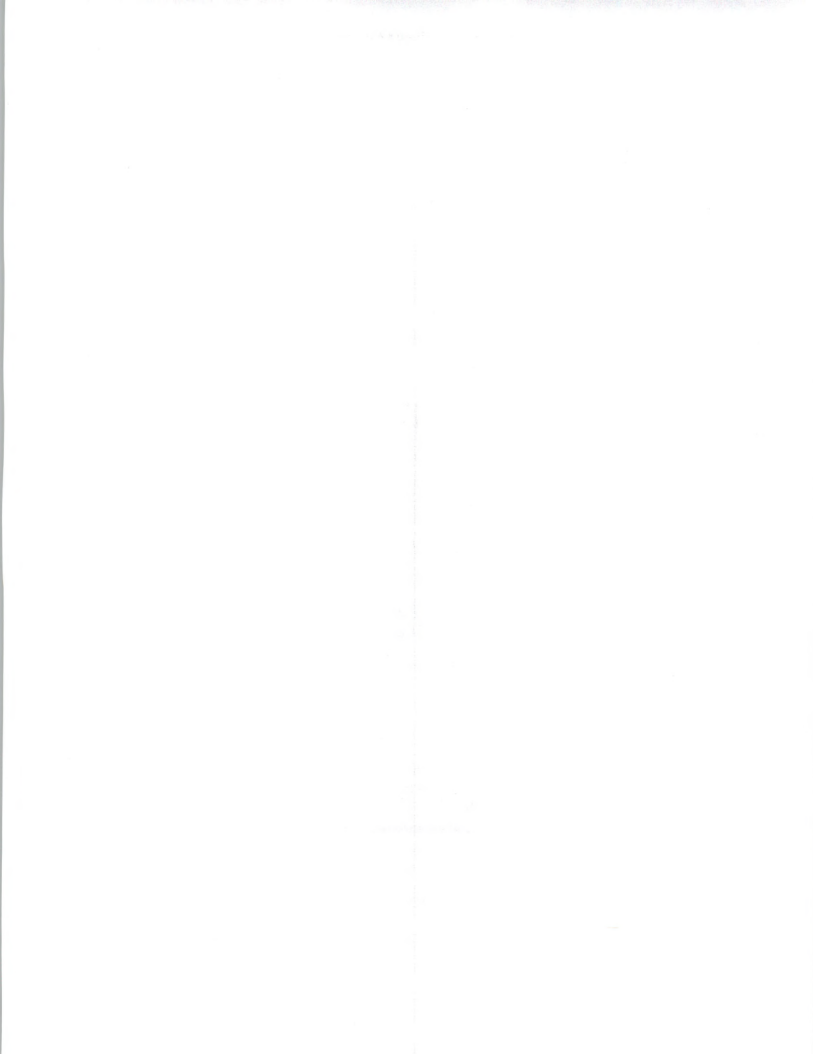
EXHIBIT V-1

**Insurance:
Environmental Threats and Opportunities****• Threats**

- Industry-directed public anger may increase regulations
- Push for national health insurance may paralyze L&H segment, perhaps for years of transition (5-10 years off?)
- Increasing pressures on profitability
- Life insurance becoming less profitable, segment is shrinking
- Likely increased rate of insurer insolvencies
- Increasingly, insurers self-insure (a threat for L&H, Blues)
- Postage may rise 25% in 1991

• Opportunities

- Angry policyholders are now increasing claims volumes substantially
- More and more states require auto insurance IDs
- Increasingly, insurers self-insure (an opportunity for TPAs)
- Outsourcing of DP functions is increasing; for example: Kodak contract with IBM (all industries)



C**Competition**

As mentioned in various places, there is little use by those interviewed of outside vendors for these types of applications. The critical competition for Moore IDS—both in terms of new sources for current, basic applications, and in terms of advancing into some of the enhanced service opportunities—is the in-house organization. Both large and mid-sized insurers in most cases have upgraded variable image printing to laser-printer capabilities in the last few years, have succeeded in this upgrade, and are not interested in seeing that success or their reputations challenged by an outside vendor like Moore IDS.

The exception is the Blues, where EDS has been relatively successful in taking over such operations, often on a facilities management basis.

Additional enhanced services competition is likely from alliance/acquisition targets listed in Exhibit IV-1.

D**Leverage Potential**

Within the insurance industry, INPUT sees relatively few opportunities to leverage one opportunity into another, especially because most enhanced services opportunities are relatively discontinuous with the basic services (see Exhibit III-30).

The exception on leveraging is the potential for customers to migrate from one enhanced application to another, specifically from the premium billing and collection packaged service to the EFT/ACH-based premium-billing service, and from bar code-assisted filing to electronic imaging and filing.

As always, of course, there are potentials to establish a business relationship through one service and then expand to others. This may prove especially important as Moore IDS proposes enhanced services that increasingly tie customers' information services operations to Moore IDS operations—potentially bridging into Moore IDS takeovers of in-house data centers—cases where trust in the vendor will be of premium sales-related value.

E**Marketing Ideas**

Most relevant marketing ideas have been detailed earlier: use of an operations study as a Trojan Horse, high-level sales calls on financial executives to cost-justify Moore IDS services through the postponement of more laser-printer purchases, and substituting bar code-assisted and/or all-electronic image filing for printing and filing of extra paper copies.

One additional marketing idea may be worth Moore IDS' examination. For many of the basic applications, in-house printing of most documents is done on a daily basis. It would be worth probing insurers (especially in

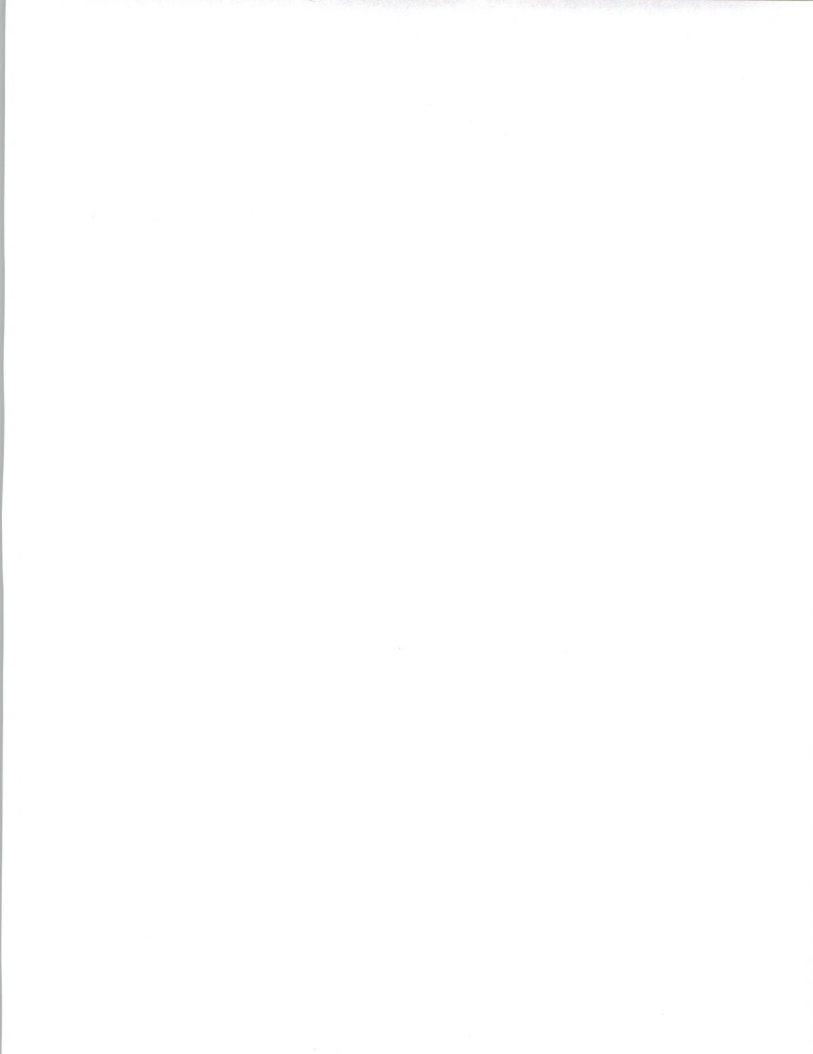


reference to price breaks from economies of scale in set-up/print run costs) whether weekly runs might provide adequate service to policyholders for some or all documents.

F**Other Application Opportunities**

Promotional mailings were excluded from the scope of INPUT's research mandate by Moore IDS, and were not mentioned significantly by interviewees on a spontaneous basis.

No other application opportunities surfaced beyond those already discussed.





Appendix: Questionnaire





Appendix: Questionnaire

Introduction

[Note: When these questions are used after a pre-questionnaire (for interviewee qualification/networking) has been used with this person to verify that the right person is being reached, skip the item below in [] brackets.]

[]

INPUT is an international consulting firm specializing in information services.

As one of our current projects, we are now working to determine the future role of information services in providing improved *business mailing services* to organizations like yours.

To do this, INPUT is *now researching how the insurance industry uses business mailings*. Two examples of the kinds of mailings we are studying are: policy documents sent to policyholders and your explanations of benefits sent with the checks that pay claims.

I have a short series of questions on your business mailings that can be handled right here on the phone. Can you assist with this research project by answering these questions?

[If no] Can you suggest someone else in your organization who might be able to answer them?

Ref: _____ at

() _____ *[phone]*

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[If yes] These questions will take about 20 or 30 minutes to complete, is this a good time for you?

[if not, reschedule for] _____ day/date at

_____ [local time] / _____ [California time]

]]

Please note that the objective of this study is to determine industry-wide trends. We will be putting your responses together with many others to analyze broad patterns and key business mailing issues, so your particular responses will be held in confidence and not cited individually. Therefore, we encourage you to be as open and frank as possible, so that INPUT can develop a comprehensive picture of the insurance industry's uses for business mail.

Do you have any questions before we get started?

[If they ask whether INPUT will be publishing the results, answer ...

...Since we don't know yet whether we will find good opportunities for information services to help improve business mailings, we have not yet determined whether any published report will result from this research.]

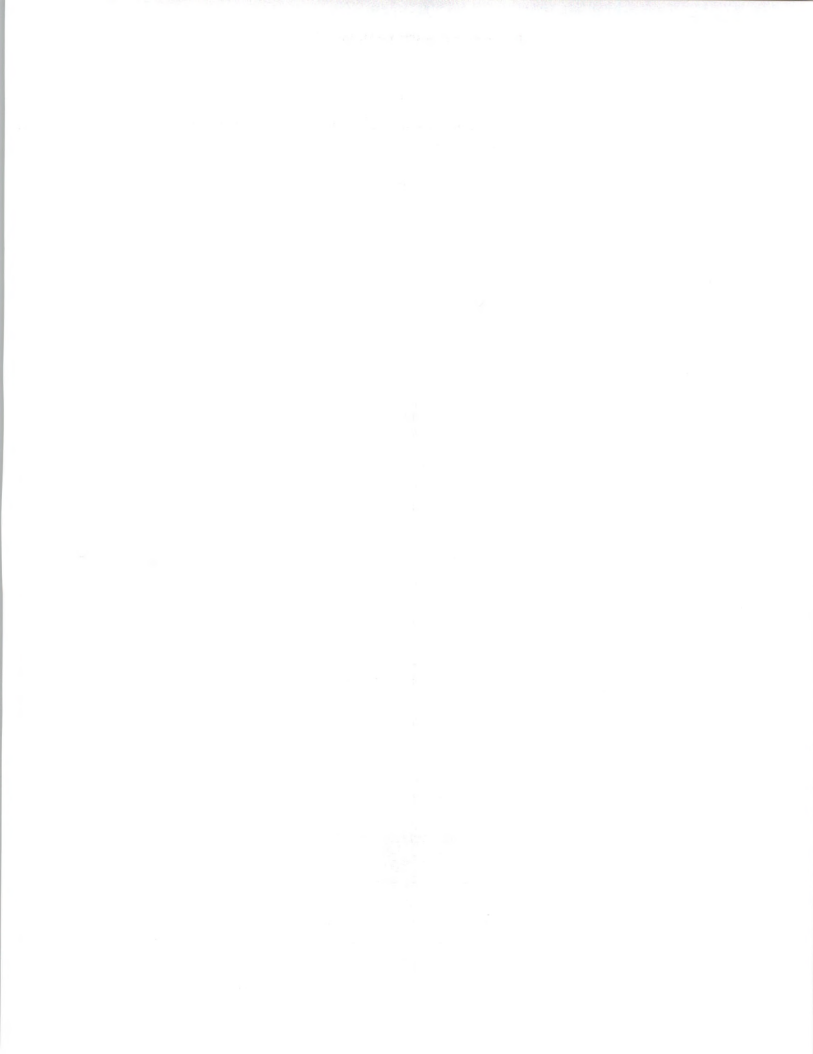
[If they ask whether this research is for a specific client, answer...

...No, it is part of INPUT's continuing program of research in how information services are used in different industries.]

[If they ask whether they can get a copy of the findings of the research, answer...

...We can send you a **high-level overview of the results**, if that would be of value to you as a way of thanking you for your time.]

[If "yes," note name and mailing address here:]



For our interview over the next 20 or 30 minutes, I have a structured set of questions of several types: some yes/no questions, some asking for 1-to-5-style ratings, and some open ended. We will be asking about both current and future business mailing operations.

Before we start, let me assure you that there are no "wrong answers," and your frank responses will be valuable to the success of the research project.

Questions

[Note: Skip question 1 (and go right to question 2) if these answers are known from use of the pre-questionnaire (for interviewee qualification/networking). Transfer those answers to this page for later reference.]

1. To help me get oriented to your role in your overall organization, can you answer questions about business mailing operations with reference to your entire company, or are you in a position to speak about only one or more specific divisions or departments?

[Note: If divisions/departments only, ask:]

Which division (or department) will you be speaking about?

Which other divisions (or departments) also have sizable business mailing operations?

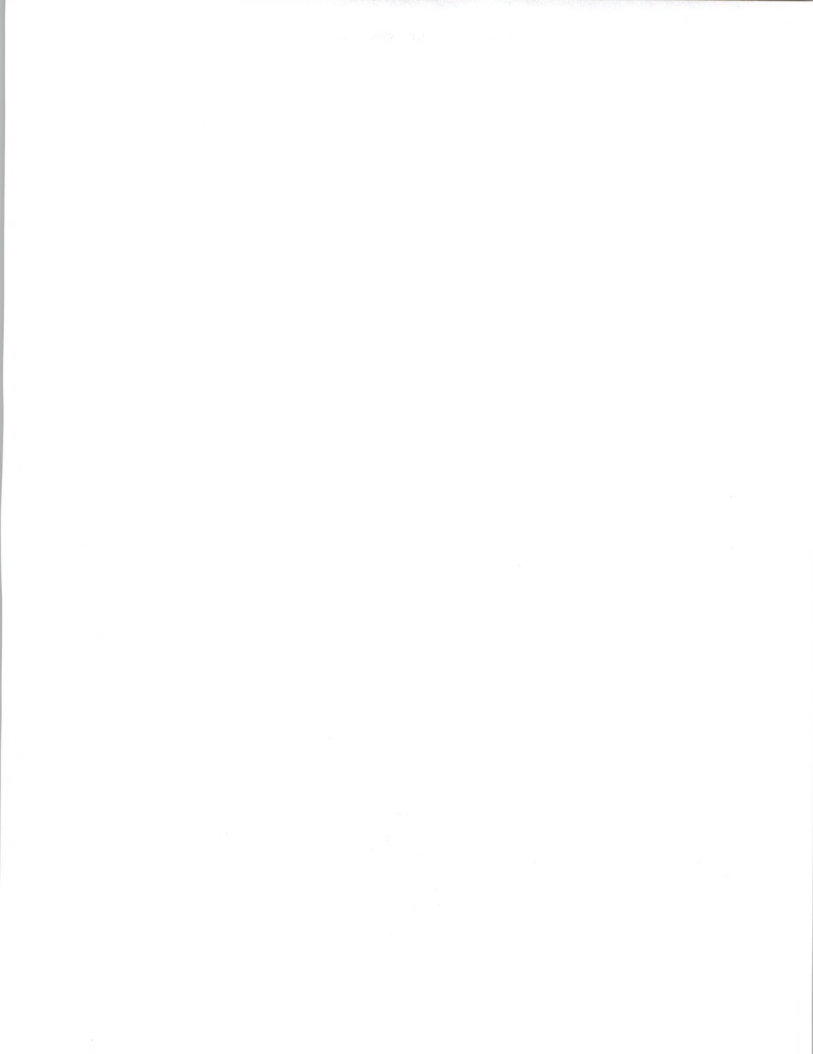
[Note: Make next question fast, likely will not use]

Who would be a good person to talk with in [that/those] other division[s] or department[s] to understand their business mailing operations?

Div./Dept.

Name

Phone



Industry Mailings Questionnaire Application Data Spreadsheet

Industry: Insurance

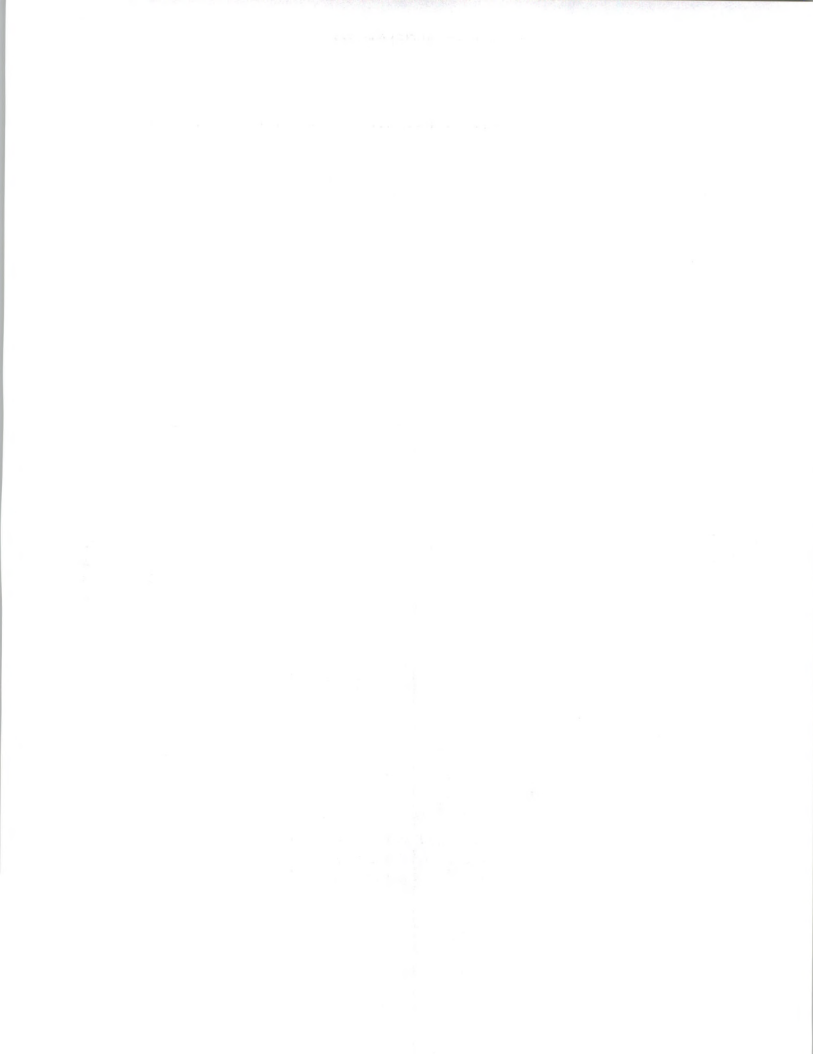
Company Interviewed

Person Interviewed/Title

Interview Date/By

Business Mailing Categories	Physical Content of Mailing	Variable Information Content	Overall Import	Overall Mail Volume		Distribution of Production (Percent)		
				Times/Yr.	#/Mailing	In-house	Outside	Hybrid
1. Policies								
2. Premium notices								
3. Explanation of benefits w/check (EOB)								
4. Govt. reporting forms (W-2, 1099, etc.)								
5. Customer surveys								
6. Updates on benefits								
7. ID cards								
8. Proxies								

2. [Note: For all of question 2, record answers on this standard spreadsheet form.]



2. I'd like to start by reviewing a list of **typical, leading categories of business mailings** in the insurance industry.

2.a. Our list includes printing and mailing of items such as _____ and _____. [Note: list top 2 on list for industry]. Let me go through this list one by one.

2.b. and 2.c. [Note: Do this for each item on the list]

For each of these business mailing categories, I'd like to **briefly** note the physical content of the mailing's printed content: What is custom-printed for each item and how the information that is different for each item is merged or otherwise joined with what is standard. Let's first take _____
[first item on the standard list found on the answer sheet]

2.d. Now I'd like to shift gears a bit, and determine how important each of these standard categories of business mailing is to your company (or division/department). The key question is: Which of these business mailings is really critical to the mission of your organization? Which mailings are critical in importance, whether or not they are large in quantity mailed?

[Note: As each "mission critical" category is named, the interviewer should assign a value of "5" under "Overall import" on the chart. Then ask about each one not mentioned by the interviewee. If it is really "mission critical" also, give it a "5" ... if not, determine whether it is of moderate importance ("3") or minor importance ("1") and record the numbers. If government-required, write "req" instead of a number]

2.e. We would also like to get approximate quantities of each of these mailing types. Let's take them in order once again:

[Note: Go down chart for "Overall mail volume" answers]

2.f. Which of these mailings do you handle in-house, and which do you vend to outside printing and mailing services?

[Note: Answer on chart]

2.g. What factors determine the particular volumes you cited in each category? Which categories of mailings are likely to change significantly in volume over the next few years? Why?

3. The next set of questions deals with INPUT's 3-part model of an organization's complete system for business mailings, so let me first explain the model.

For business mailings that require more than just a name and address, INPUT sees three basic parts of the complete system.

First, what we call the **front-end** for business mailing is the information system or systems—whether based on a personal computer or a mainframe—that maintain the overall data base of information required for mailings in general, and that are used to generate the specific information required for a particular mailing. One example of such a front-end system is the organization's data base for accounts receivable.

The second part of the model is the **printing and mailing process** itself: the merging of standard information with receiver-unique data for printing, the actual printing operation, and the stuffing and distribution (normally to the Postal Service) of the physical piece of mail. To follow the example cited above, this is the printing of the monthly bills themselves, stuffing the bills and any other enclosures (such as payment envelopes or new-service announcements) into the mailing envelopes, sorting by ZIP code, affixing postage, and delivering the bundles or bags of bills to the local post office.

Finally, the third part of a complete mailing system is the **back-end** processes that may follow the mailing itself. While many business mailings (such as government-required informational announcements) may be one-way, with no such back-end process, many others involve the recipient's return of a piece of mail. Such return-mail situations require back-end processes, such as processing policyholders' payments and updating data bases of policyholder records.

3.a. With that introduction, here's the next question: Thinking about the **complete mailing system's three parts**—the information systems front-end, the printing and mailing process itself, and the follow-up back-end—what works best for you in your **in-house** mailing operation; in other words, what specific parts of your in-house mailing system are working really well for you, representing solid, ongoing success stories?

[Note: List successes here, but do not take time for "why" followup on successes:]

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3.b. In contrast, where do you have significant **problems** in the **in-house operation** of your complete mailing system, whether in the front-end, the printing and mailing process itself, or the back-end?

[Note: List problem areas below on the "Problem" lines. As it is comfortable/appropriate, either list all top problems first, then come back to the list of problems to get "why" for each), or ((alternatively)) ask "why" after each problem is stated.]

Problem: _____

Why: _____

Problem: _____

Why: _____

Problem: _____

Why: _____

4.a. *[Note: Rephrase as appropriate ... or skip ... based on answers to 2.f—in-house vs. outside...]*

Now let's **shift away from in-house operations**: Do you handle any of your complete printing and mailing operations **outside**, vending the process to a full-service vendor for printing and mailing?

____ Yes or ____ No *[Mark one]*

[[Note: If "No," ask...]]

Why not?

[...Then (again, if 4.a. was "No"), jump to Question 15.]

[Note: If 4.a was "Yes," continue here, with 4.b.:]

4.b Thinking again about the information systems front-end, the printing and mailing process itself, and the followup back-end, how do they work **best** for you when you contract **outside** for complete printing and mailing operations; in other words, what specific parts of such complete outside operations are working really **well** for you, representing solid, on-going success stories?

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[Note: List successes here, but do not take time for "why" followup on successes:]

4.c. In contrast, where do you have significant **problems** in such outside operations, whether in the front-end, the printing and mailing process itself, or the back-end?

Problem: _____

Why: _____

Problem: _____

Why: _____

Problem: _____

Why: _____

4.d. Which outside vendors do you use now?
For what?

Which: _____

For
what: _____

Which: _____

For
what: _____

Which: _____

For
what: _____

5. Remembering the distinction we discussed among front end operations, printing and mailing operations, and back-end operations, let's look first at just the printing and mailing process itself. Which **complete printing and mailing operations** do you now vend outside?

Gender Inequality and Intimate Partner Violence

David P. Collier, University of Michigan

David P. Collier, University of Michigan

David P. Collier, University of Michigan

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[...then followup for each "Which" with:]

Why?

[...and]

What vendors?

[...and enter all answers below]

Which?

Why?

What vendors?

6. **Beyond** those you **now** contract outside for, would you consider contracting outside for any **other complete printing and mailing operations** for business mailings?

[If no, ask:]

Why not?

[If Yes, first ask...]

Which operations or mailings would you consider?

[...then followup for each "Which" with:]

Why?



[...and enter both answers below]

Which?

Why?

7. Using a 1-to-5 scale, how likely are you to outsource more of these complete printing and mailing operations? A rating of 1 would indicate not at all likely, while a 5 would be very likely:

[Note: Circle number]

7.a.

1

2

3

4

5

Not likely

Very likely

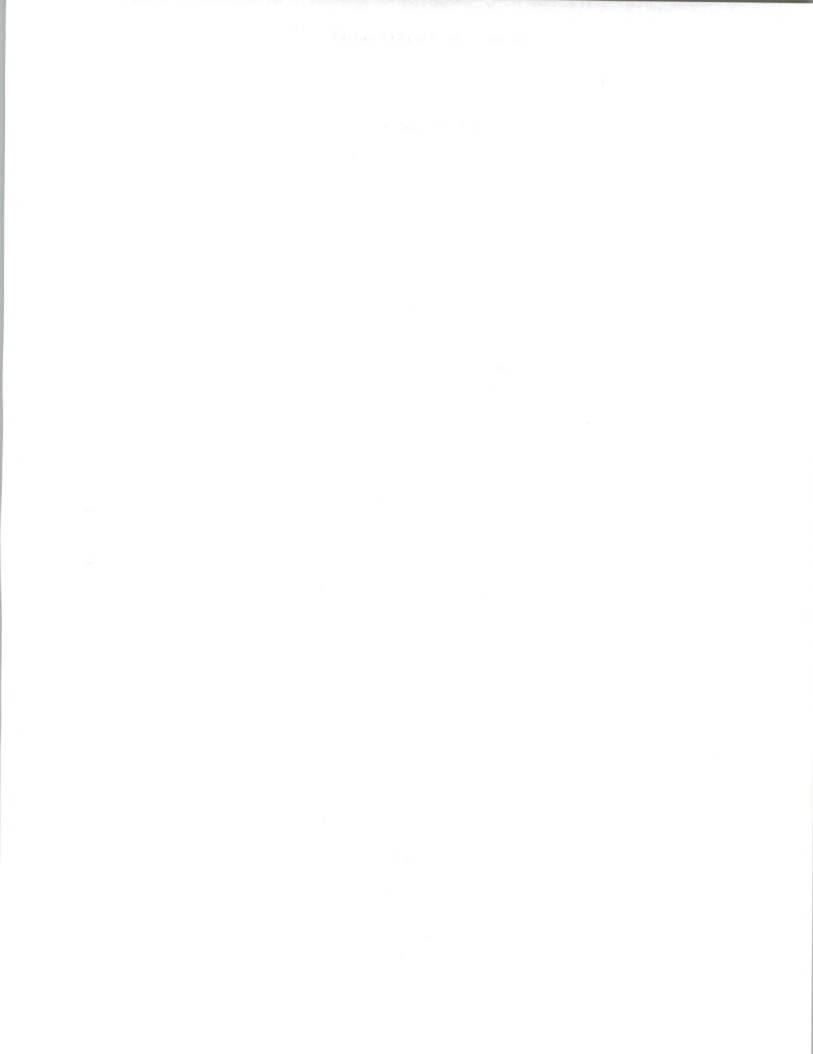
- 7.b. What are the reasons behind that rating?

8. Which groups in your organization would need to participate in evaluating whether to outsource more of your complete printing and mailing operations?

9. Now let's shift **away from** printing and mailing to the front-end and back-end operations in INPUT's model. Do you now use any outside vendors specifically for these **front-end or back-end operations**?

[If no, ask:]

Why not?



[If Yes, first ask...]

Which front-end or back-end operations do you now vend outside?

[...then followup for each "Which" with:]

Why?

[...and:]

What vendor(s)?

[...and enter all answers below]

Which?

Why?

What vendors?

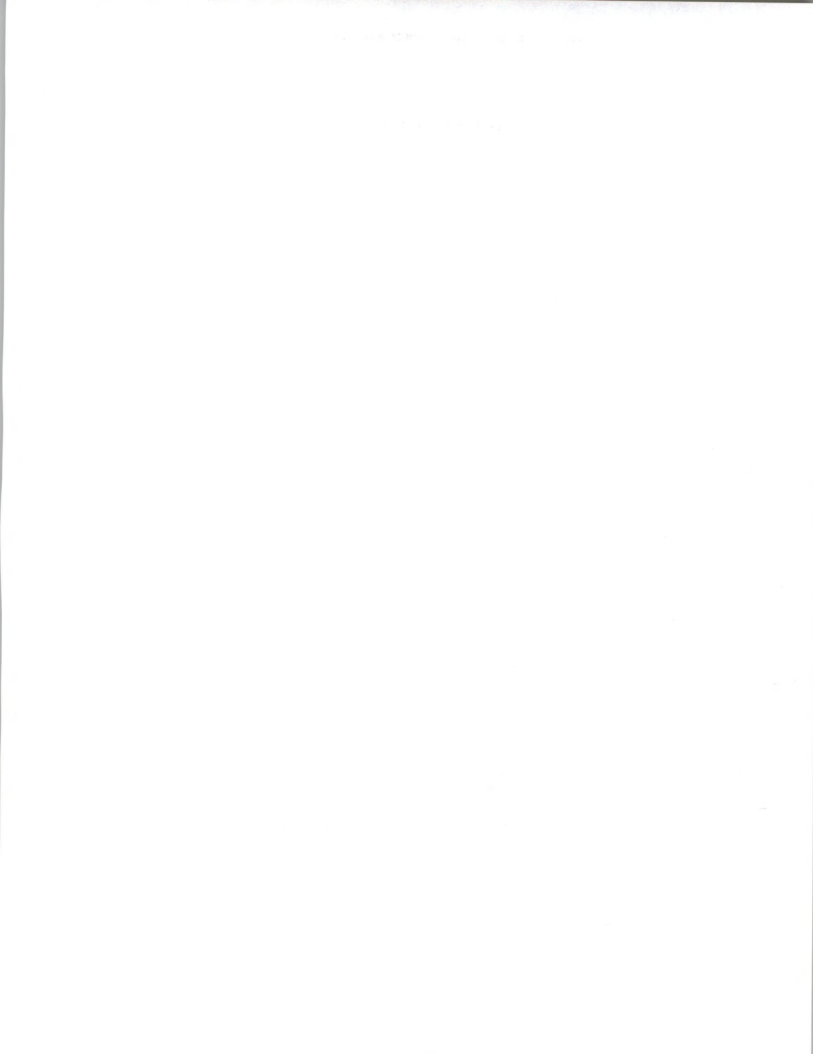
10. **Beyond** those you now contract outside for, would you consider contracting outside for any other **front-end or back-end operations** in the overall business mailing system?

[If no, ask:]

Why not?

[If Yes, first ask...]

Which operations or mailings?



[...then followup for each "Which" with:]

Why?

[...and enter both answers below]

Which?

Why?

11. Using a 1-to-5 scale, how likely are you to outsource [some or more, as appropriate] of these front-end or back-end business mailing operations? A rating of 1 would indicate not at all likely, while a 5 would be very likely:

[Note: Circle number]

11.a.

1

2

3

4

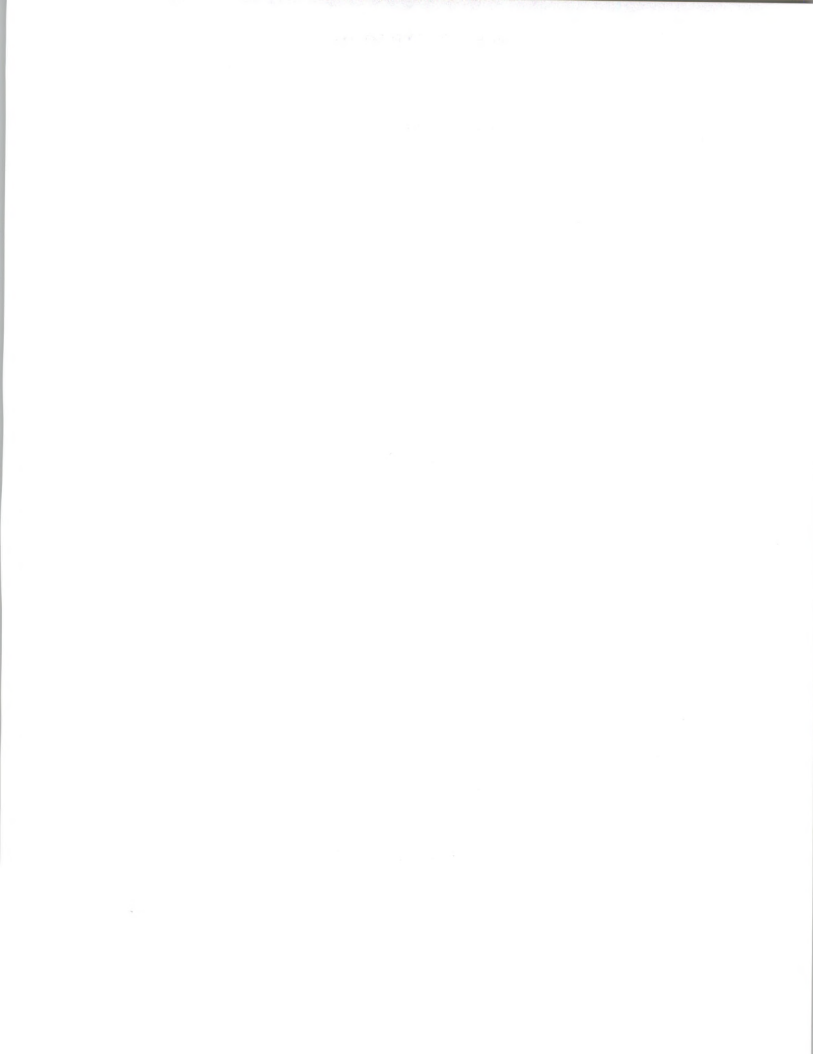
5

Not likely

Very likely

- 11.b. What are the reasons behind that rating?

12. Which groups in your organization would need to participate in evaluating such outsourcing of front-end or back-end business mailing operations?



13. Are there any areas of your business mailing operations where you are already considering using—or where have you decided to use—more such outside vendors?

[If Yes] How would you describe these areas?

[If Yes] Which vendors?

14. When you print mailings outside, how important is it for the vendor's printing plant to be physically close to you? Let's use the 1-to-5 scale again, where 1 is unimportant and 5 is critical.

[Note: Circle number]

14.a.

1

2

3

4

5

Unimportant

Critical

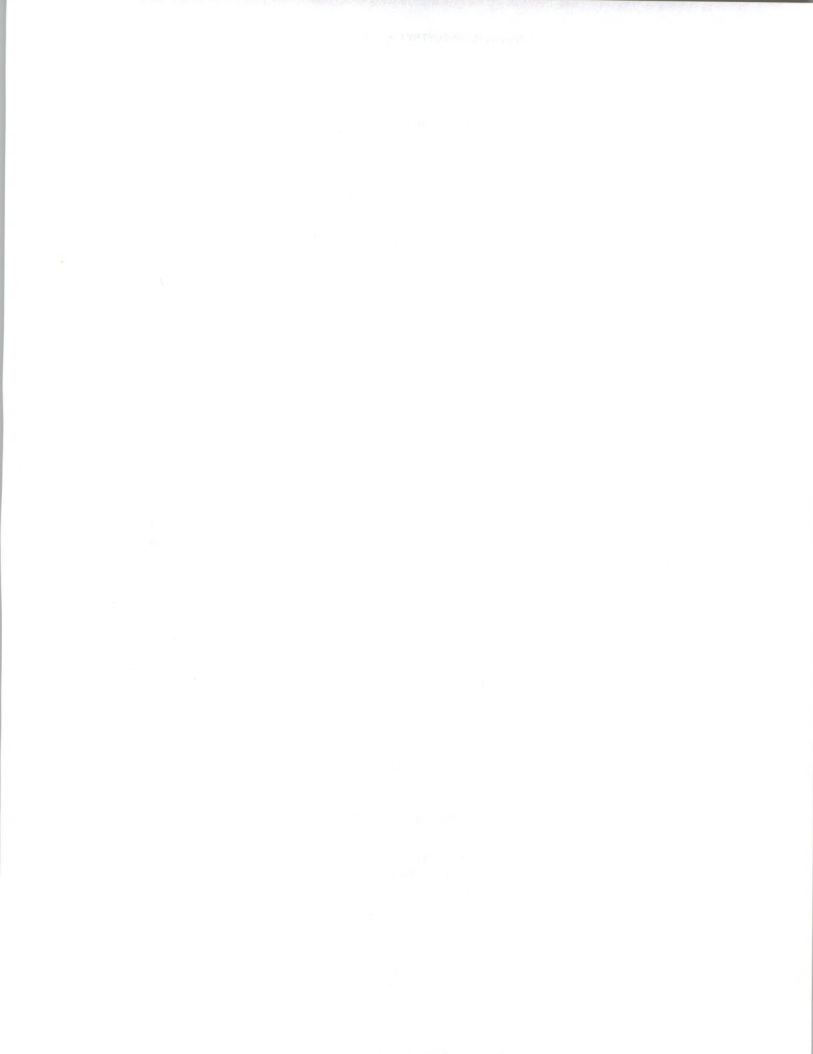
- 14.b. Why did you choose that number?

- 14.c. *[Note: Ask only if rating was 4 or 5]* For you, how close is close?

[[Note: After question 14.b/c., skip questions 15 through 22 and jump now to question 23.]]

[[Note: Return point, if answer to question 4.a. was "No"]]

[[Note: If you just finished question 14.b/c., skip questions 15 through 22 and jump now to question 23.]]



15. Remembering the distinction we discussed among front-end operations, printing and mailing operations, and back-end operations, let's look first at **just the printing and mailing process itself**. Would you consider contracting outside for any **complete printing and mailing operations** for business mailings?

[If no, ask:]

Why not?

[If Yes, first ask...]

Which operations or mailings would you consider?

[...then followup for each "Which" with:]

Why?

[...and enter both answers below]

Which?

Why?

16. Using a 1-to-5 scale, how likely are you to outsource any of these complete printing and mailing operations? A rating of 1 would indicate not at all likely, while a 5 would be very likely:

[Note: Circle number]

16.a.

1

2

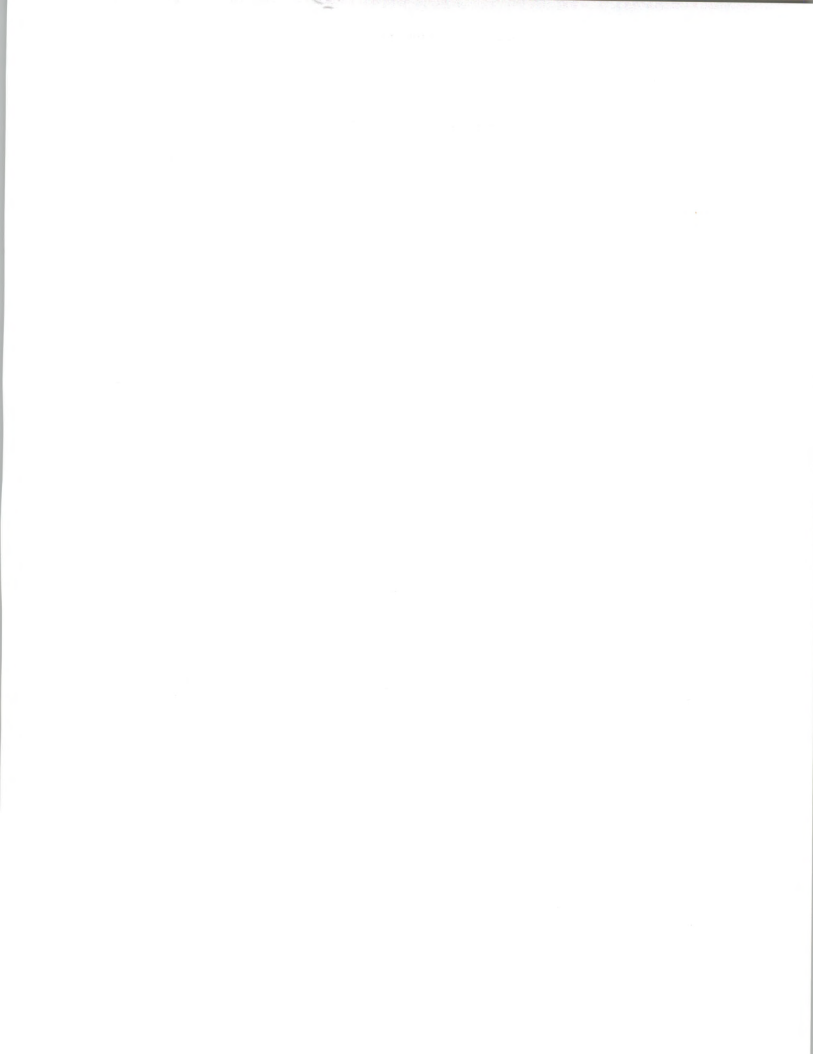
3

4

5

Not likely

Very likely



16.b. What are the reasons behind that rating?

17. Which groups in your organization would need to participate in evaluating whether to outsource some of your complete printing and mailing operations?

18. Now let's shift away **from** printing and mailing **to** the front-end and back-end operations in INPUT's model. Would you consider contracting outside for any **front-end or back-end operations** in the overall business mailing system?

[If no, ask:]

Why not?

[If Yes, first ask...]

Which operations or mailings?

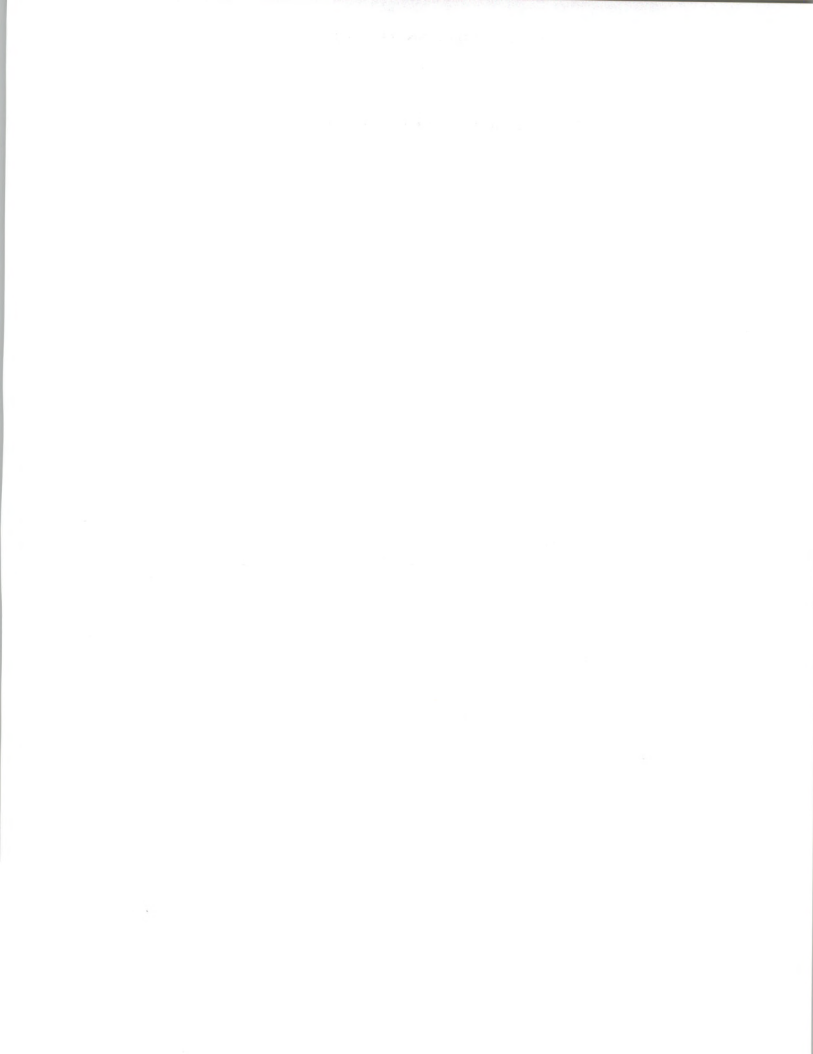
[...then followup for each "Which" with:]

Why?

[...and enter both answers below]

Which?

Why?



19. Using a 1-to-5 scale, how likely are you to outsource some of these front-end or back-end business mailing operations? A rating of 1 would indicate not at all likely, while a 5 would be very likely:

[Note: Circle number]

19.a.

1

2

3

4

5

Not likely

Very likely

- 19.b. What are the reasons behind that rating?

20. Which groups in your organization would need to participate in evaluating such outsourcing of front-end or back-end business mailing operations?

21. Are there any areas of your business mailing operations where you are already considering using—or where have you decided to use—outside vendors for printing and mailing, or for front-end or back-end operations?

[If Yes] How would you describe these areas?

[If Yes] Which vendor or vendors?

2. 2018-2019

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

16.

17.

18.

19.

20.

22. If you were to print mailings outside, how important is it for the vendor's printing plant to be physically close to you? Let's use the 1-to-5 scale again, where 1 is unimportant and 5 is critical.

[Note: Circle number]

22.a.	1	2	3	4	5
	Unimportant			Critical	

- 22.b. Why did you choose that number?

22.c. [Note: Ask only if rating was 4 or 5] For you, how close is close?

[[Note: **Return point** from question 14.b/c. and **continuation point** from question 22.b/c.]]

23. For these business mailings that require information services, do you have any plans over the next few years to change significantly your in-house printing and mailing capabilities or capacity?

Yes_____ or No_____

[If Yes]

What are your plans?

[If No]

Why not?

24. Under what conditions would you consider outsourcing all of your business mailing operations to a vendor?

25. What is your view of the possibility of having all your printing and mailing operations managed at your site by an outside vendor, under a **facilities management** contract?
-

26. Would your organization welcome a no-cost evaluation study to analyze your business mailing operations?

____ Yes: What would you expect such a study to cover?

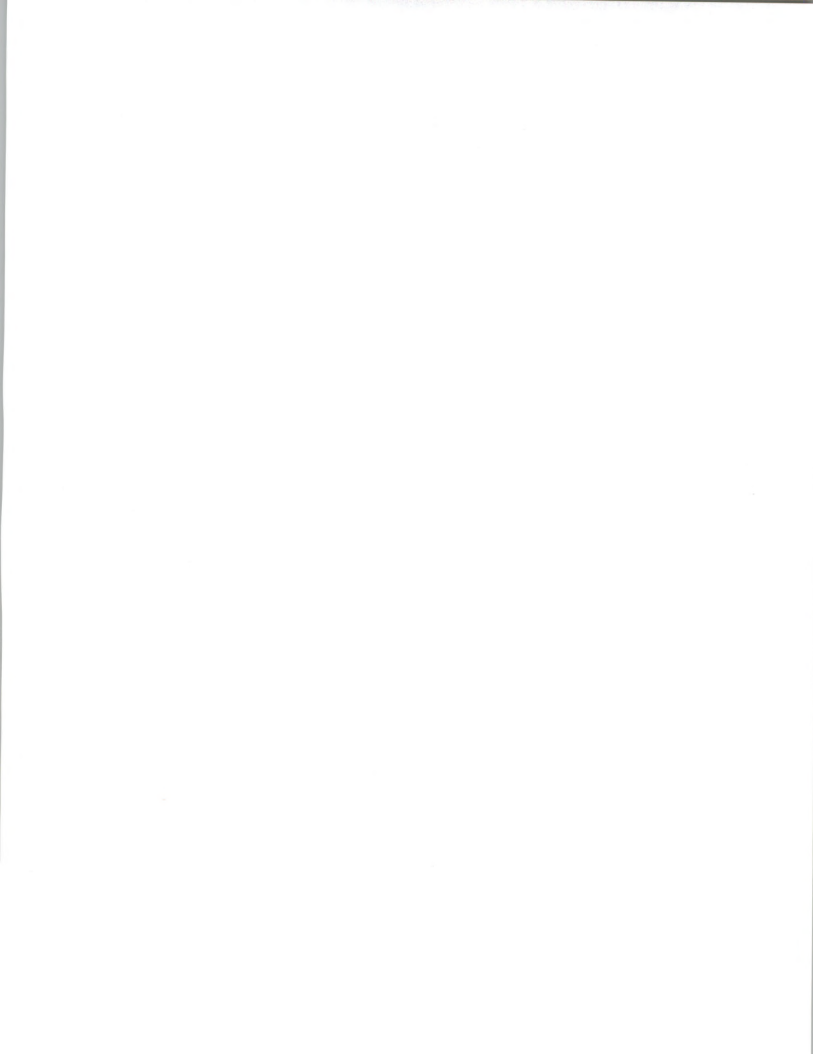
[or]

____ No: Why not?

27. Now for one last question, a chance for some fun work with your imagination. Let's enter a fantasy world where anything is possible. Clear your mind of present limitations, and transport yourself mentally to 5 years in the future. You are speaking to a group of people about a major—and very desirable—breakthrough in business mailing that you have achieved. Please describe the subject of your talk in as much detail as possible, forgetting for a moment whether it really makes sense or seems impossible—just let it come out as you fantasize it.
-
-

That's my last formal question. Thinking back on what we have discussed, do you have any further thoughts about your business mailing operations and their information content, thoughts that you feel I should note for this research to be more complete?

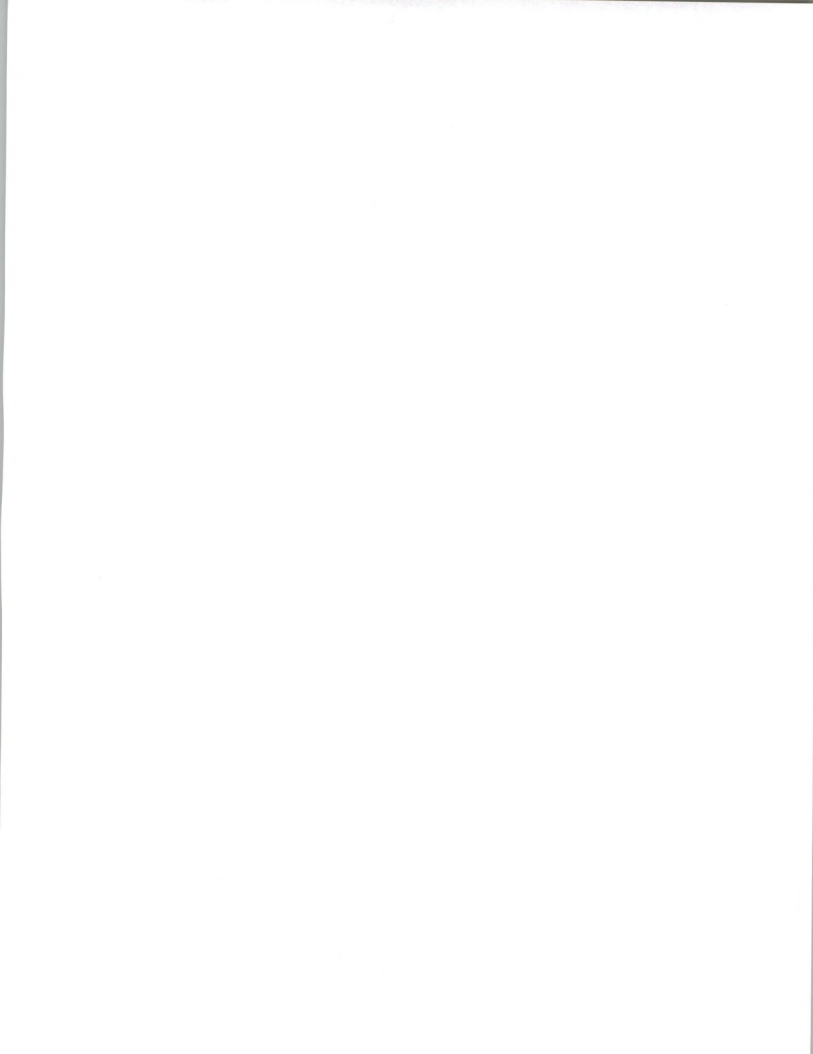
Thank you ... very helpful... *[end]*





Appendix: Calculation Worksheets



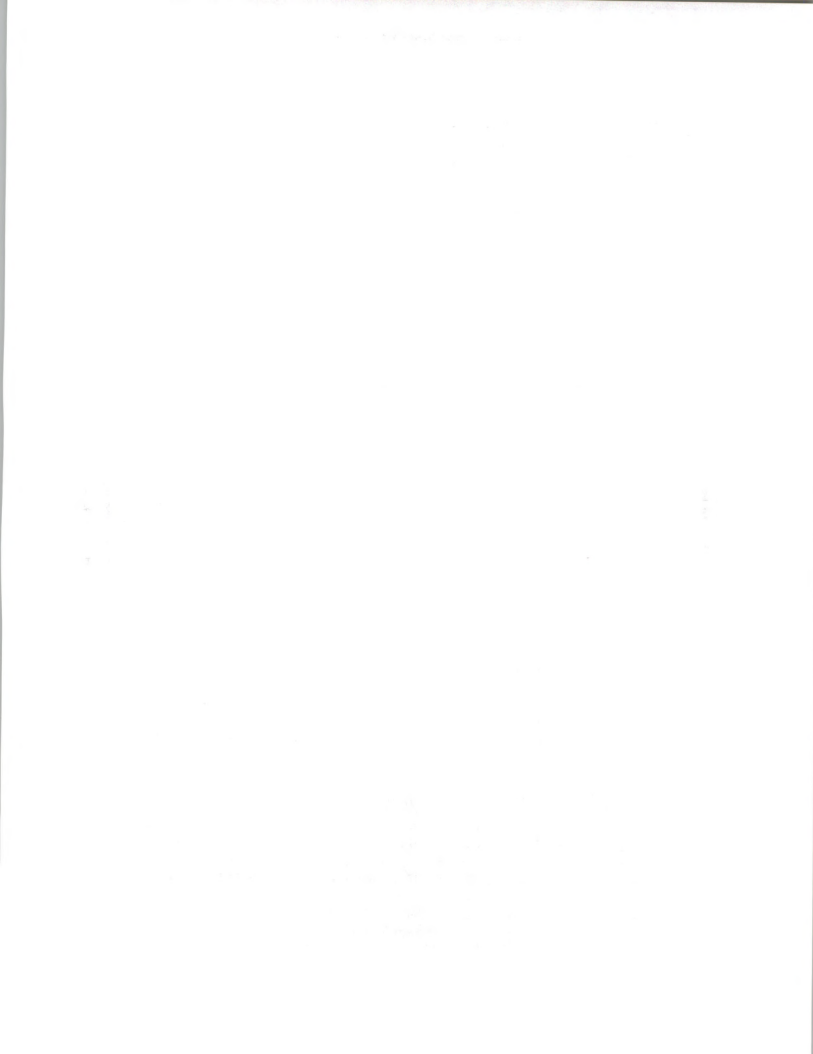




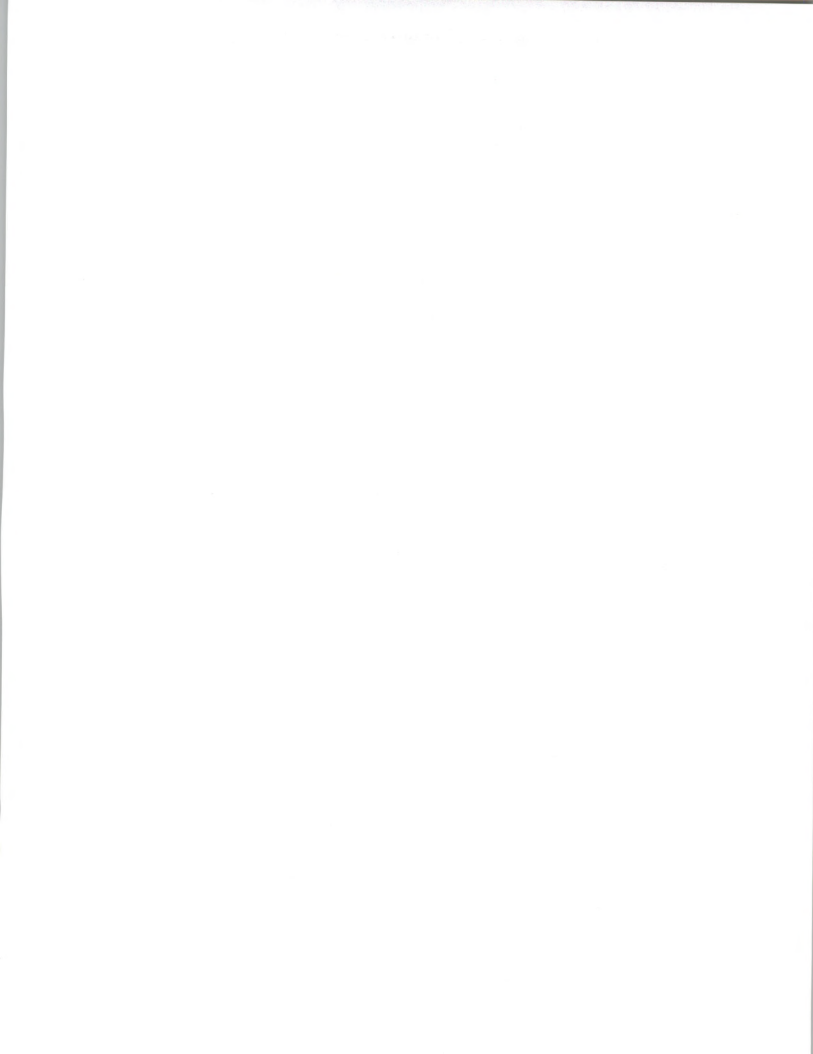
Appendix: Calculation Worksheets

These worksheets show the methodology for development of unit volume estimates

- Policy printing: P&C quantities
 - Note: personal P&C and commercial P&C quantities mixed here, but a very high proportion of totals represent personal P&C, since there is little computer-based variable-image printing of commercial P&C policies yet
 - P101: 2 mm units/yr vs. \$ 2,060 mm premium = avg. 1,000 units per \$mm
 - P103: 0.3 mm units/yr vs. \$ 1,170 mm premium = avg. 200 units per mm\$
 - P104: 0.25 mm units/yr vs. \$ 100 mm premium = avg. 2,500 units per mm\$
 - P105: 0.025 mm units/yr vs. \$ 50 mm premium = avg. 500 units per mm\$
 - P106: 0.3 mm units/yr vs. \$ 100 mm premium = avg. 3,000 units per mm\$
 - P107: 0.6 mm units/yr vs. \$ 250 mm premium = avg. 2,400 units per mm\$
 - P108: 0.2 mm units/yr vs. \$ 50 mm premium = avg. 4,000 units per mm\$
 - Calc: discard 4,000 and 200, averaging $1,000 / 2,500 / 500 / 3,000 / 2,400$ = average of 1,900 policies printed per mm of premium \$
- Policy Printing: L&H quantities
 - L201: 0.72 mm units/yr vs. \$ 710 mm premium = avg. 1,000 units per mm\$
 - L202: 0.25 mm units/yr vs. \$ 100 mm premium = avg. 2,500 units per mm\$
 - L203: 0.5 mm units/yr vs. \$ 1,200 mm premium = avg. 400 units per mm\$
 - L204: 0.1 mm units/yr vs. \$ 180 mm premium = avg. 600 units per mm\$
 - L205: 0.2 mm units/yr vs. \$ 800 mm premium = avg. 250 units per mm\$
 - L206: 0.012 mm units/yr vs. \$ 300 mm premium = avg. 40 units per mm\$
 - L207: 0.2 mm units/yr vs. \$ 1,400 mm premium = avg. 140 units per mm\$
 - L208: 0.15 mm units/yr vs. \$ 5,070 mm premium = avg. 30 units per mm\$
 - L209: 0.04 mm units/yr vs. \$ 390 mm premium = avg. 100 units per mm\$
 - calc: discard 30 and 40 and 2,500 and 1,000, averaging $400 / 600 / 250 / 140 / 100$ = average of 300 policies printed per mm of premium
- Premium Notices: P&C quantities
 - P101: 5.0 mm units/yr vs. \$ 2,060 mm premium = avg. 2,500 units per \$mm
 - P103: 7.5 mm units/yr vs. \$ 1,170 mm premium = avg. 7,000 units per mm\$



- P104: 1.0 mm units/yr vs. \$ 100 mm premium = avg. 10,000 units per mm\$
- P105: 0.14 mm units/yr vs. \$ 50 mm premium = avg. 3,000 units per mm\$
- P106: 3.6 mm units/yr vs. \$ 100 mm premium = avg. 36,000 units per mm\$
- P107: 0.25 mm units/yr vs. \$ 250 mm premium = avg. 1,000 units per mm\$
- P108: 0.5 mm units/yr vs. \$ 50 mm premium = avg. 10,000 units per mm\$
- Calc: discard 36,000 and 1,000, averaging $2,500 / 7,000 / 10,000 / 3,000 / 10,000$ = average of 6,500 premium notices printed per mm of premium \$
- Premium Notices: L&H quantities
 - L201: 1.5 mm units/yr vs. \$ 710 mm premium = avg. 2,000 units per mm\$
 - L202: 0.5 mm units/yr vs. \$ 100 mm premium = avg. 5,000 units per mm\$
 - L203: 0.25 mm units/yr vs. \$ 1,200 mm premium = avg. 200 units per mm\$
 - L204: 0.05 mm units/yr vs. \$ 180 mm premium = avg. 300 units per mm\$
 - L205: 2.4 mm units/yr vs. \$ 800 mm premium = avg. 3,000 units per mm\$
 - L207: 12.5 mm units/yr vs. \$ 1,400 mm premium = avg. 9,000 units per mm\$
 - L208: 1.25 mm units/yr vs. \$ 5,070 mm premium = avg. 250 units per mm\$
 - L209: 1.25 mm units/yr vs. \$ 390 mm premium = avg. 3,000 units per mm\$
 - note: BIPOLAR distribution, thesis that low unit billing volumes are primarily group health (single bill to large groups) providers and/or primarily yearly billers of life insurance policies
 - calc: Assuming BIPOLAR, EITHER averaging $200 / 300 / 250$ = average of 250 policies printed per mm of premium, OR averaging $2,000 / 5,000 / 3,000 / 9,000 / 3,000$ = average 4,400 premium notices printed per mm of premium
- Premium Notices: Blues quantities
 - B301: 0.8 mm units/yr vs. \$ 620 mm premium = 1,200 avg. units per \$mm
 - Note: Other interviewees did not know quantities
- EOBs: P&C quantities
 - P101: 0.015 mm units/yr vs. \$ 2,060 mm premium = avg. 7 units per \$mm
 - P104: 0.2 mm units/yr vs. \$ 100 mm premium = avg. 2,000 units per mm\$
 - P106: 0.06 mm units/yr vs. \$ 100 mm premium = avg. 600 units per mm\$
 - Note: BIPOLAR, EITHER 0 or near-0 EOBs COMPUTER-PRINTED in P&C companies (thesis: these are primarily commercial P&C companies, where losses are complex and individually settled and paid), OR average of:
 - Calc: discard 7, averaging $2,000 / 600$ = average of 1,300 EOBs printed per mm of premium \$
- EOBs: L&H quantities
 - L201: 3.5 mm units/yr vs. \$ 710 mm premium = avg. 5,000 units per mm\$
 - L202: 0.40 mm units/yr vs. \$ 100 mm premium = avg. 4,000 units per mm\$
 - L203: 3.0 mm units/yr vs. \$ 1,200 mm premium = avg. 2,500 units per mm\$
 - L204: 0.32 mm units/yr vs. \$ 180 mm premium = avg. 2,000 units per mm\$
 - L208: 15.0 mm units/yr vs. \$ 5,070 mm premium = avg. 3,000 units per mm\$
 - L209: 0.1 mm units/yr vs. \$ 390 mm premium = avg. 300 units per mm\$
 - Calc: discard 300, averaging $5,000 / 4,000 / 2,500 / 2,000 / 3,000$ = average of 3,300 EOBs printed per mm of premium \$



- EOBs: Blues quantities
 - B301: 1.5 mm units/yr vs. \$ 620 mm premium = avg. 2,400 units per mm\$
 - B304: 0.750 mm units/yr vs. \$ 390 mm premium = avg. 1,900 units per mm\$
 - Note: Other interviewees did not know quantities
 - Calc: averaging 2,400 / 1,900 = average of 2,100 EOBs printed per mm of premium \$
- EOBs: TPA quantities
 - T401: 1.25 mm units/yr vs. \$ 100 mm claims paid = avg. 12,500 units per mm\$
 - T402: 16.25 mm units/yr vs. \$ 1,000 mm claims paid = avg. 16,200 units per mm\$
 - T403: 0.62 mm units/yr vs. \$ 50 mm claims paid = avg. 12,500 units per mm\$
 - T404: 1.5 mm units/yr vs. \$ 175 mm claims paid = avg. 8,600 units per mm\$
 - Calc: averaging 12,500 / 16,200 / 12,500 / 8,600 = average of 12,400 EOBs printed per mm \$ of claims paid

